

A

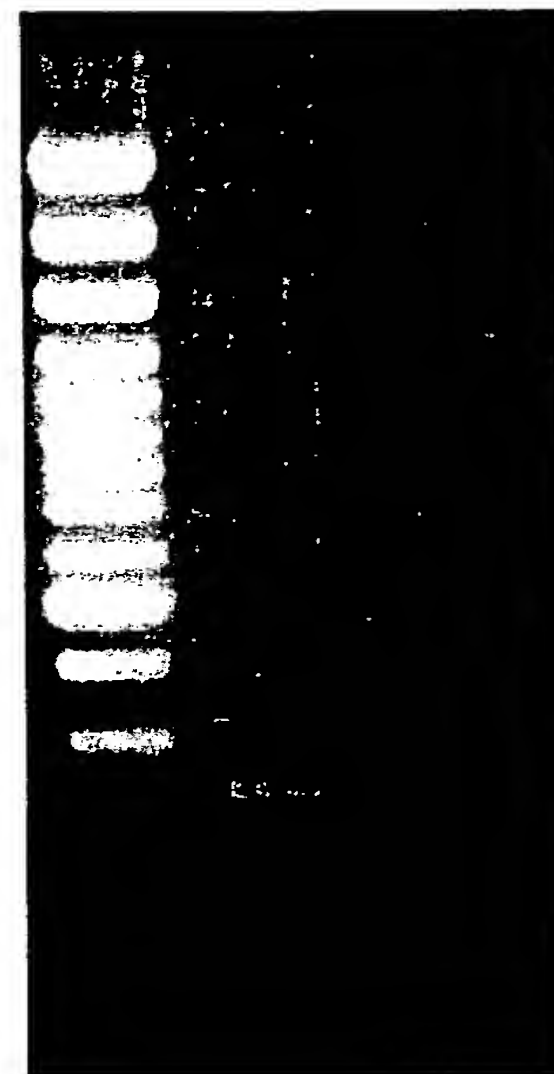
1230
653
517
234



← 567

B

M PC12 neg



- GCSFR

Figure 2

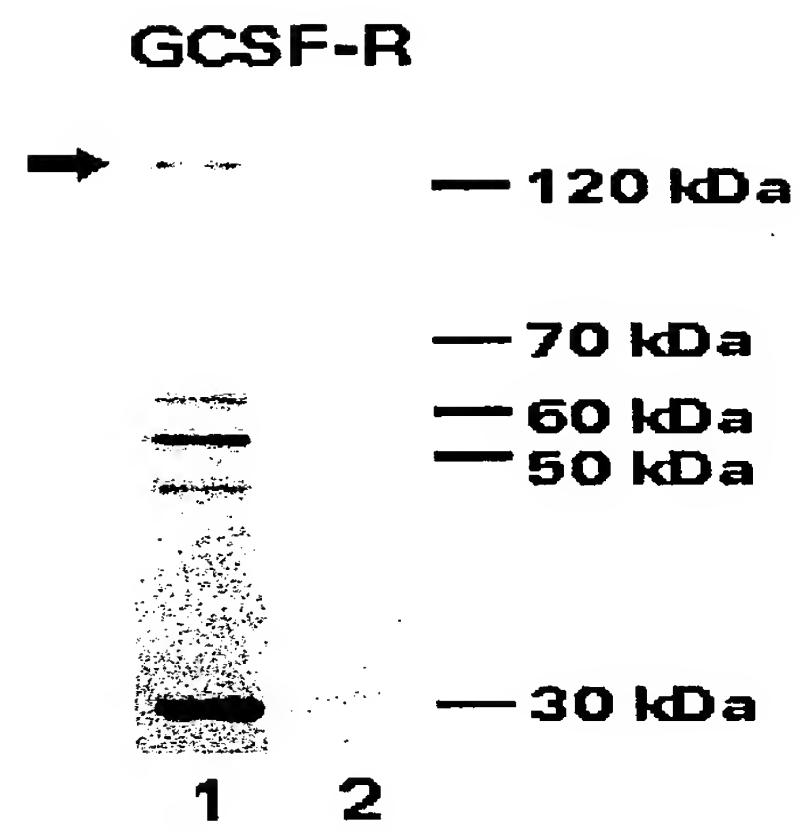


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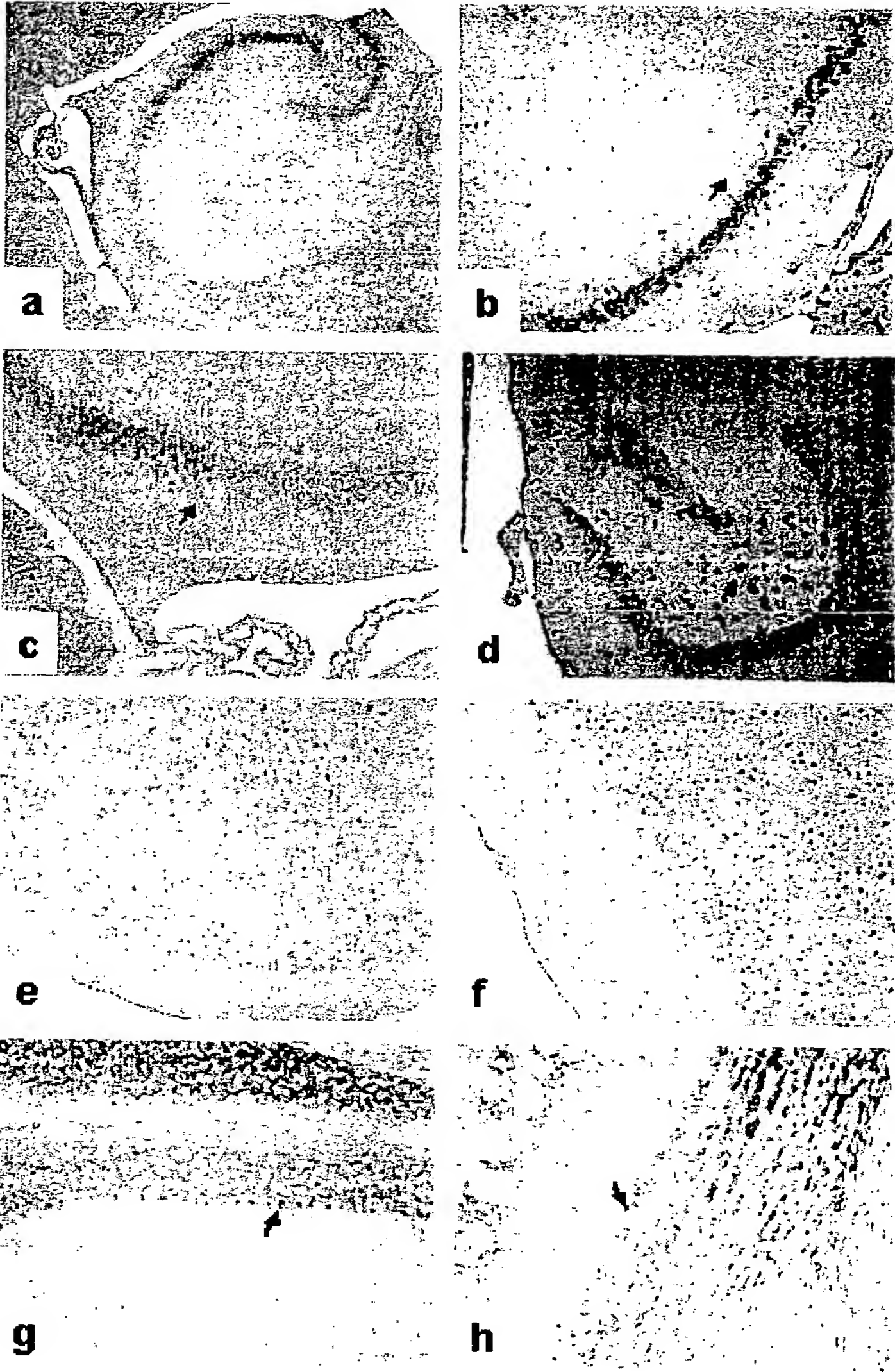


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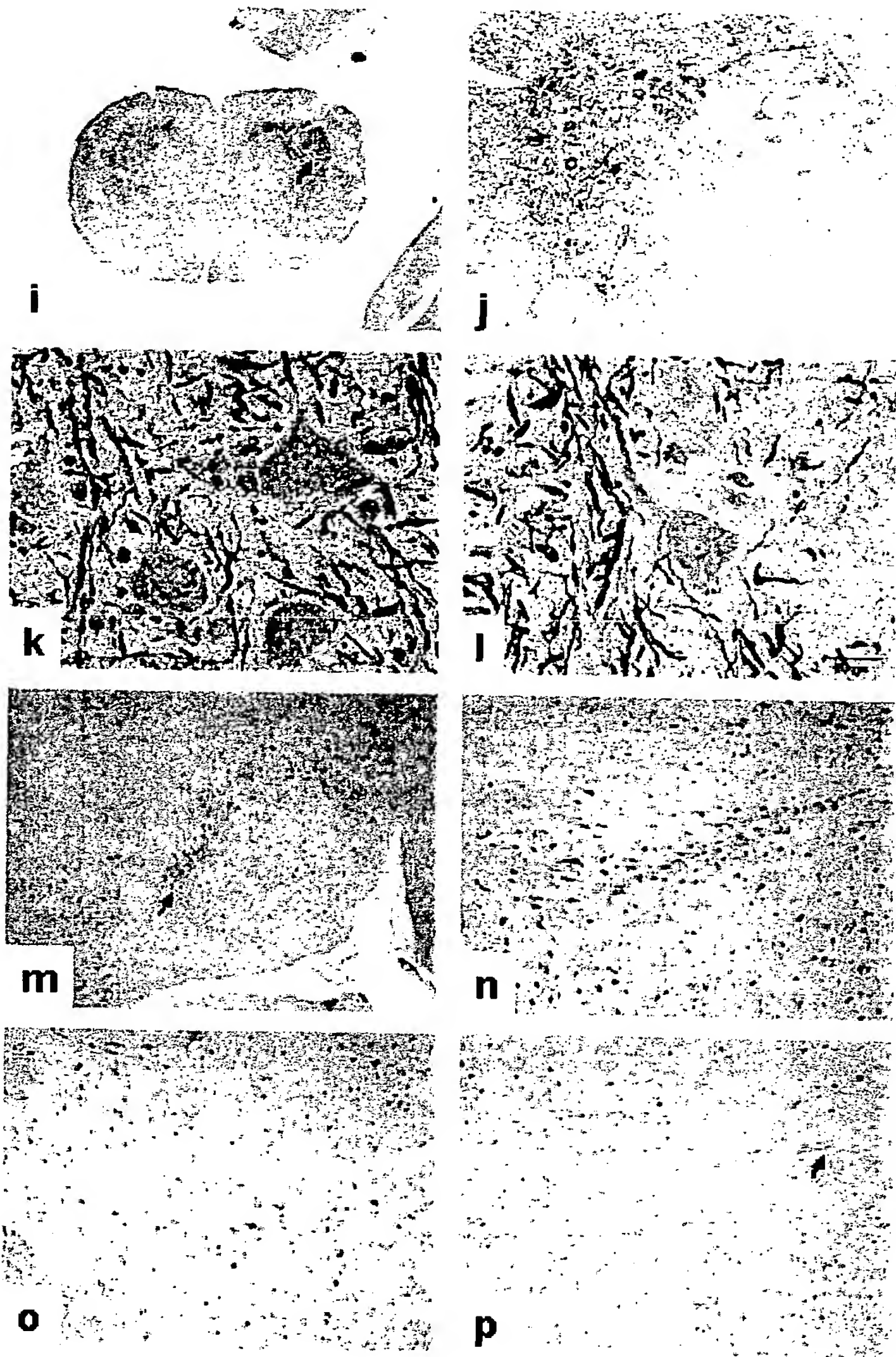


Figure 4, part II

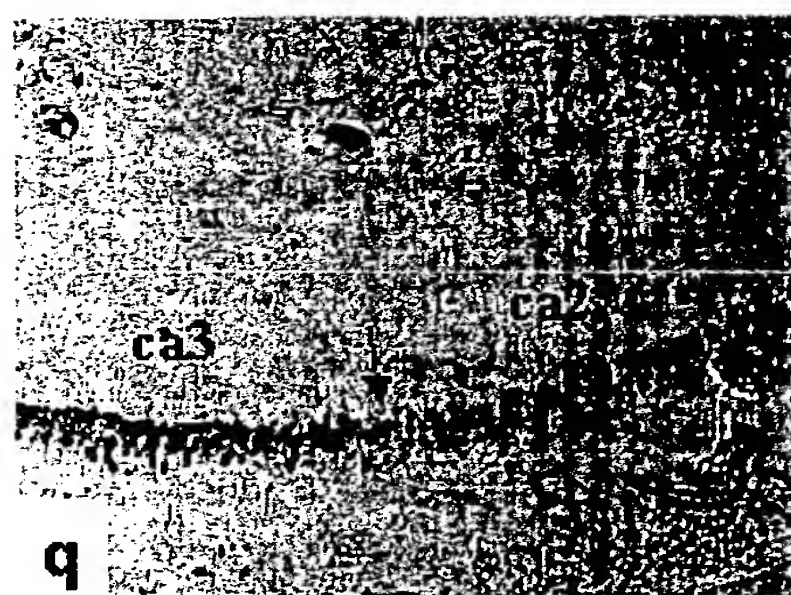


Figure 4, part III

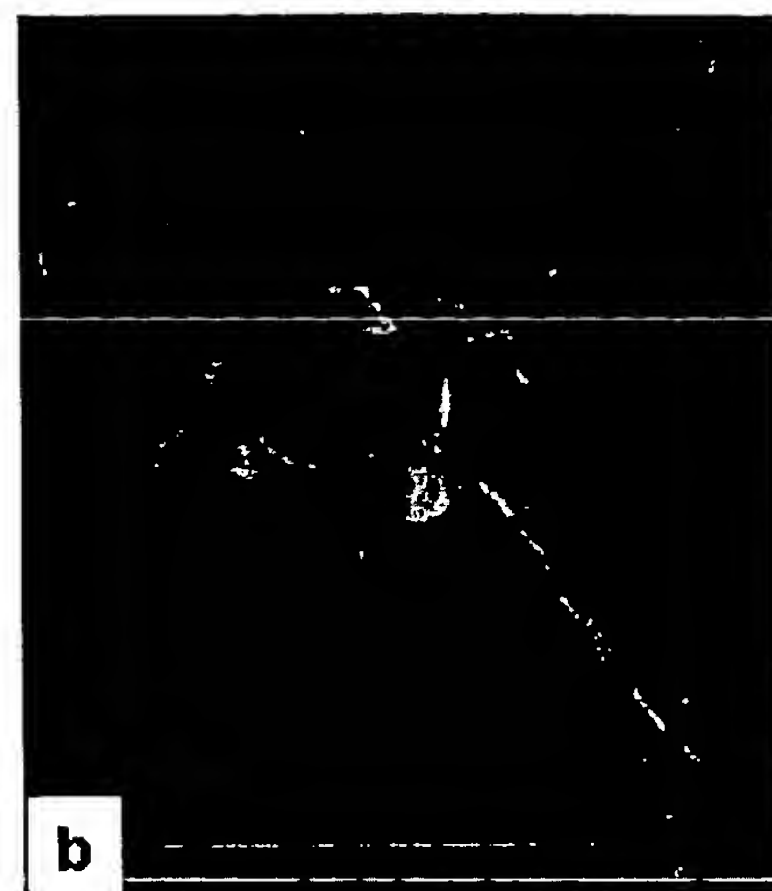


Figure 5

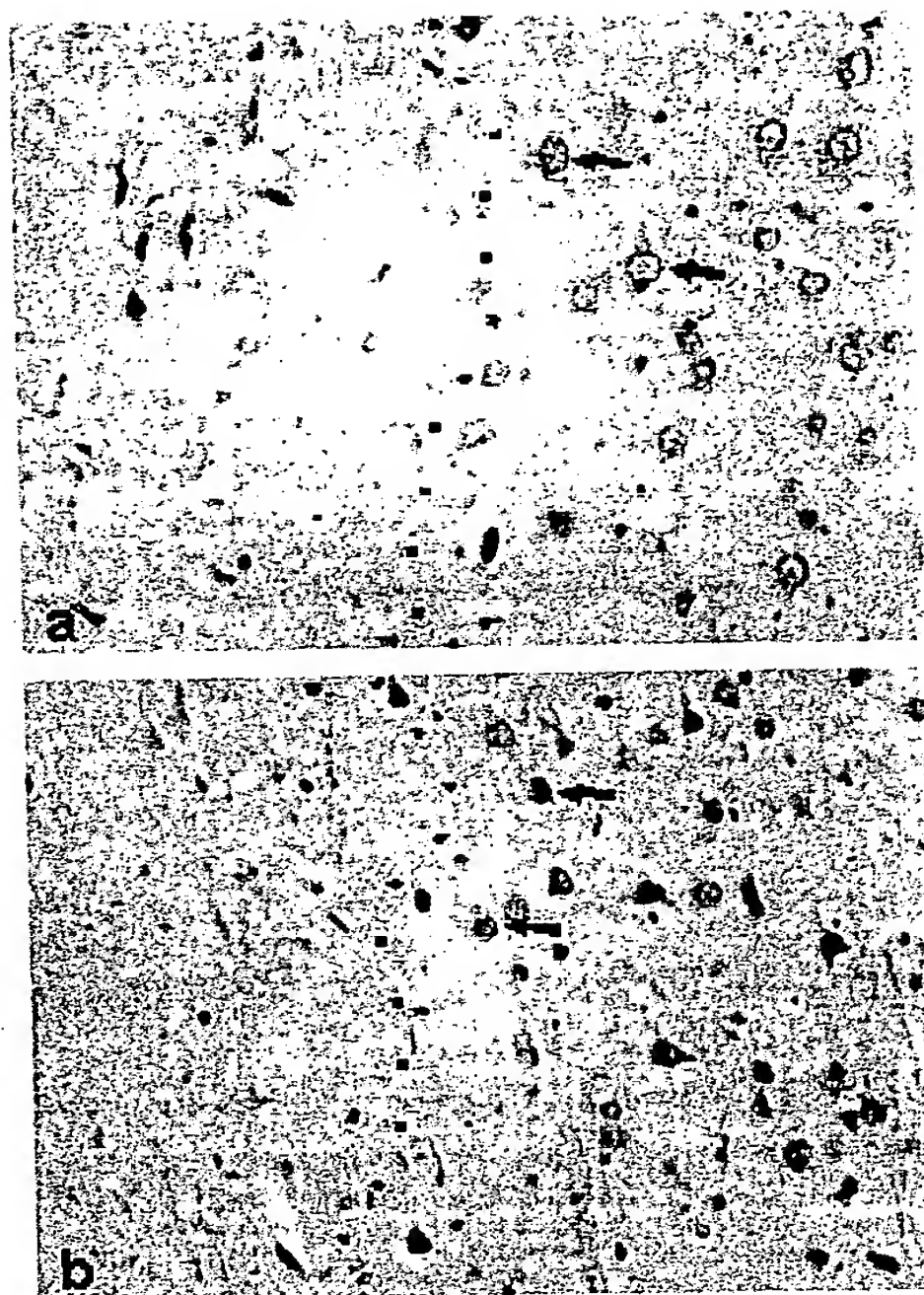


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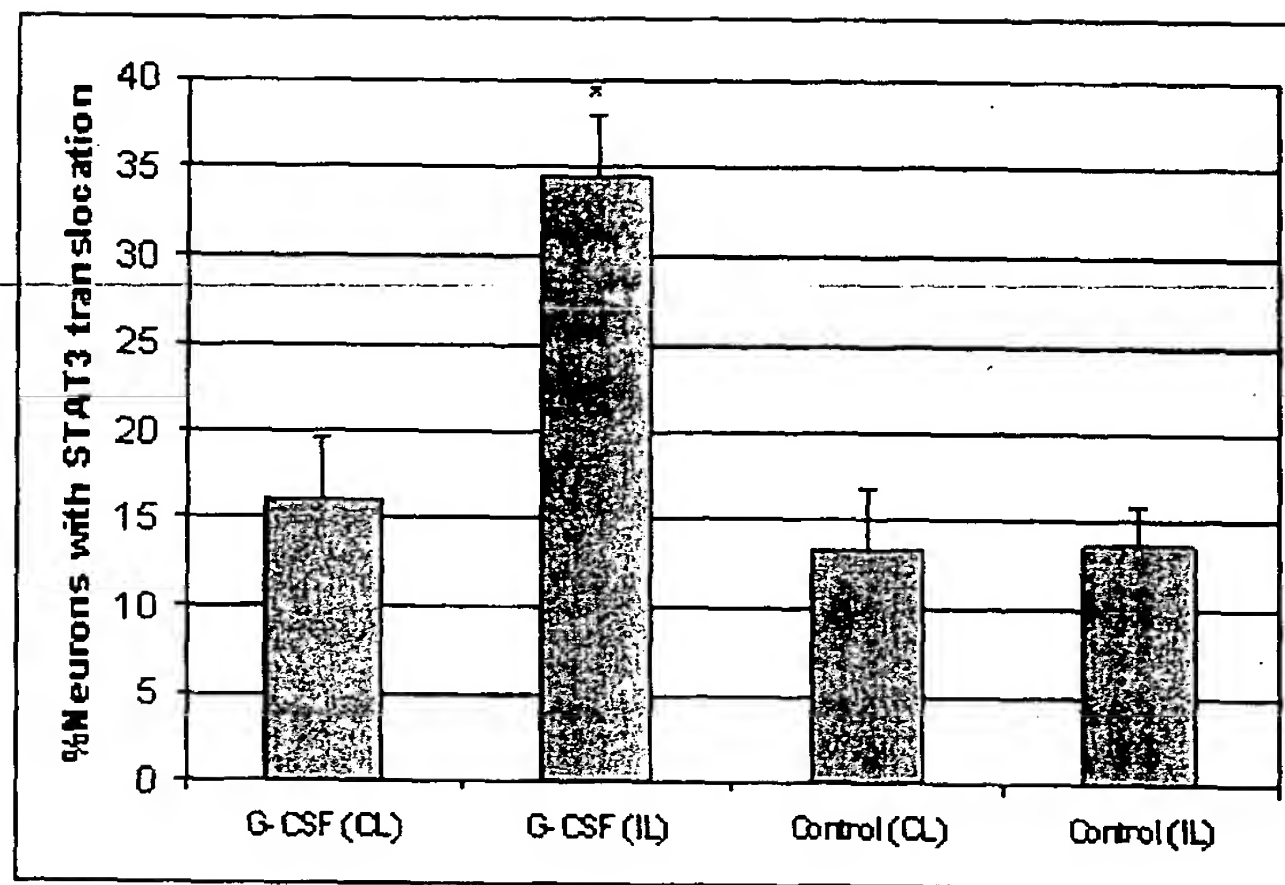


Figure 7

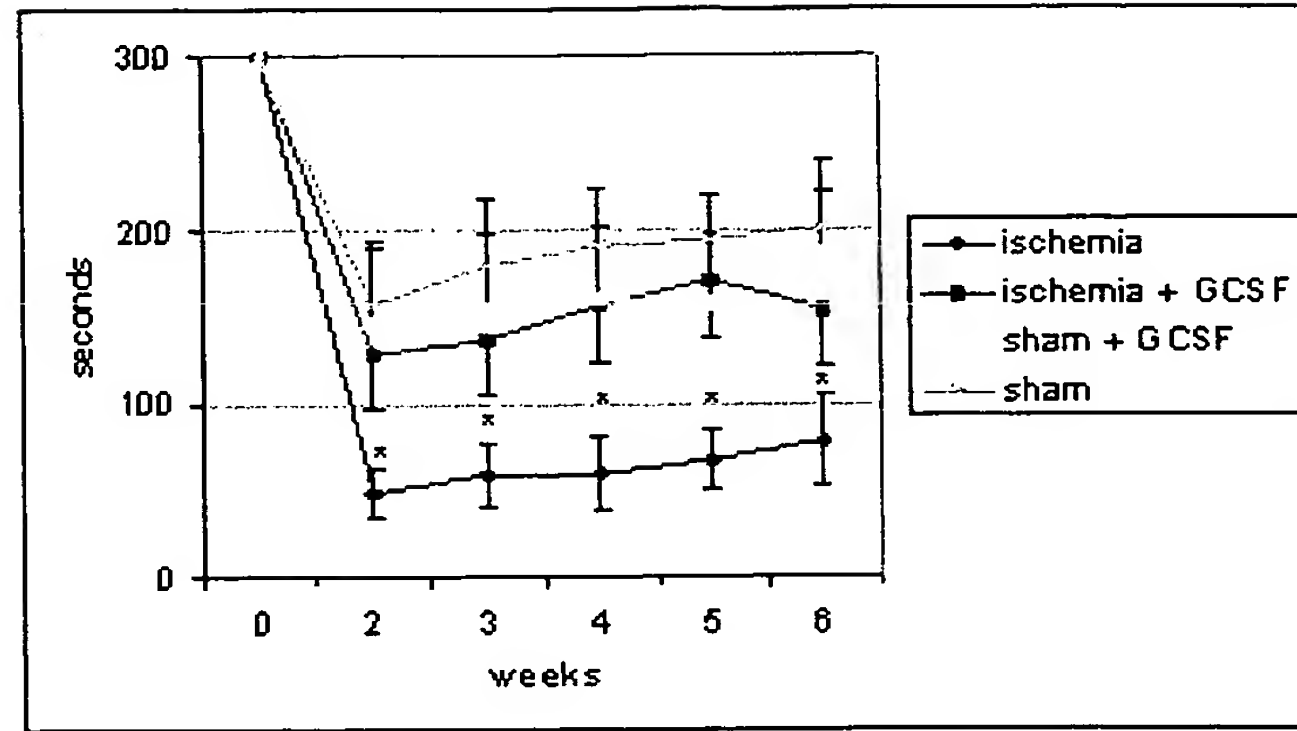
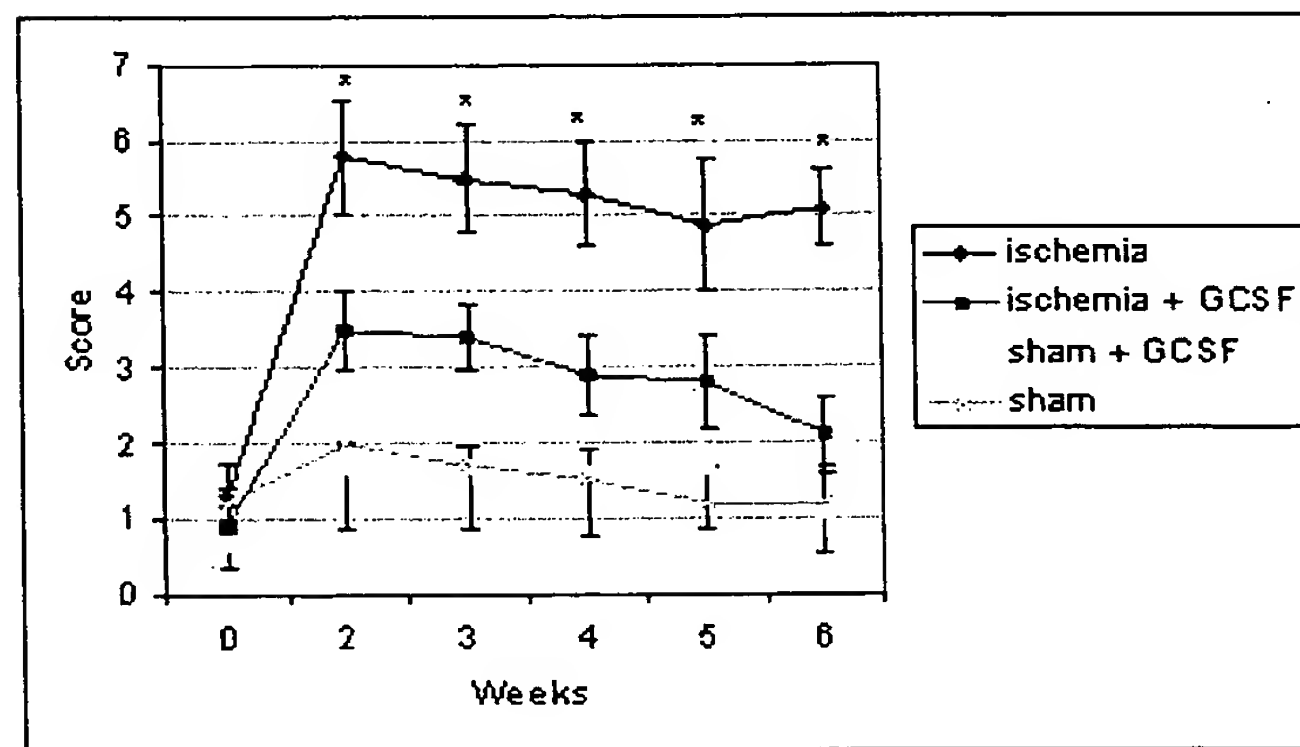
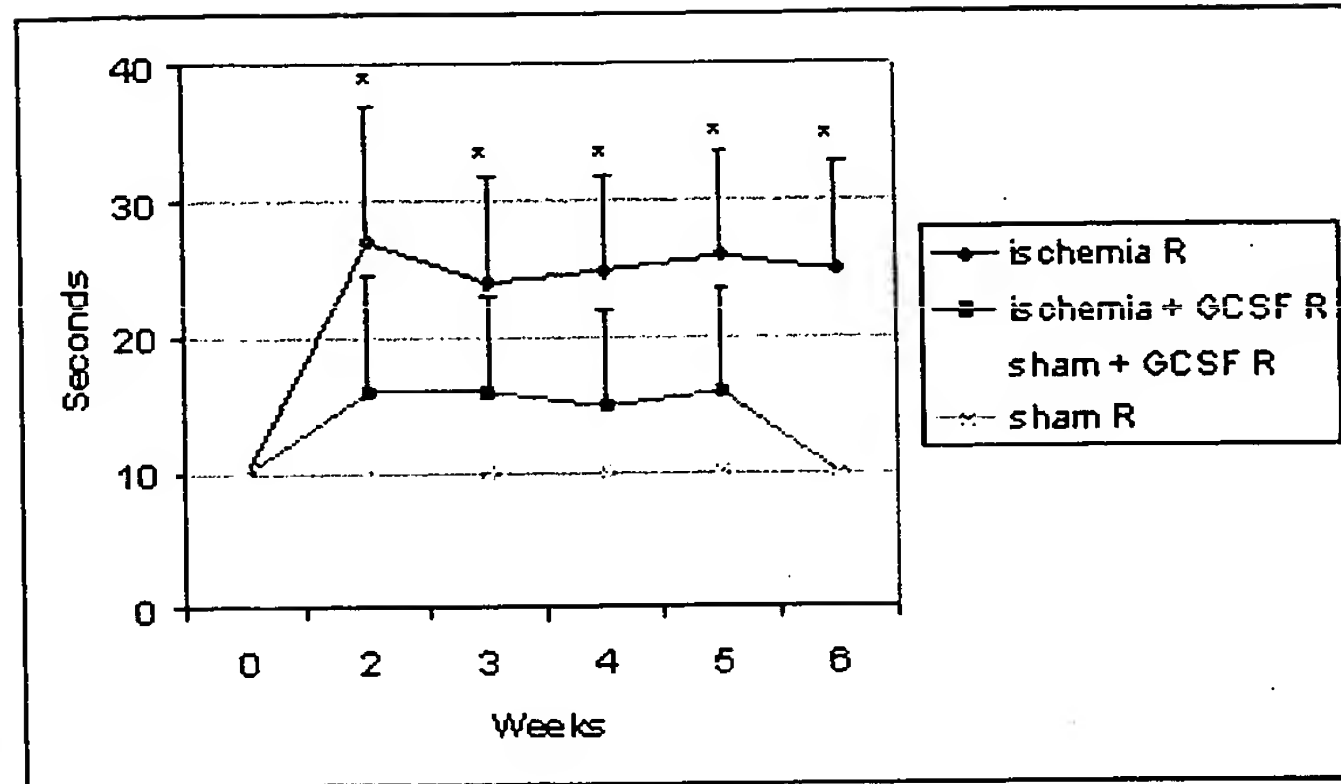
A**B**

Figure 8, part I

C



D

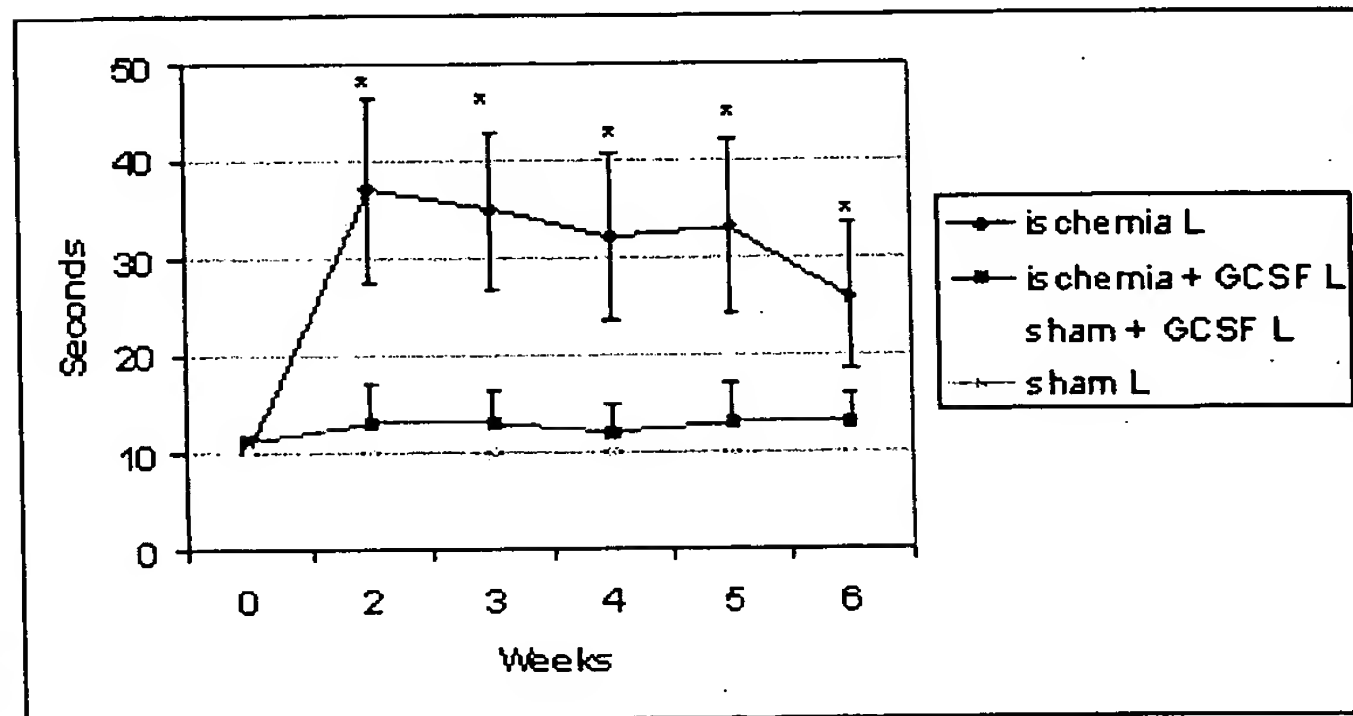
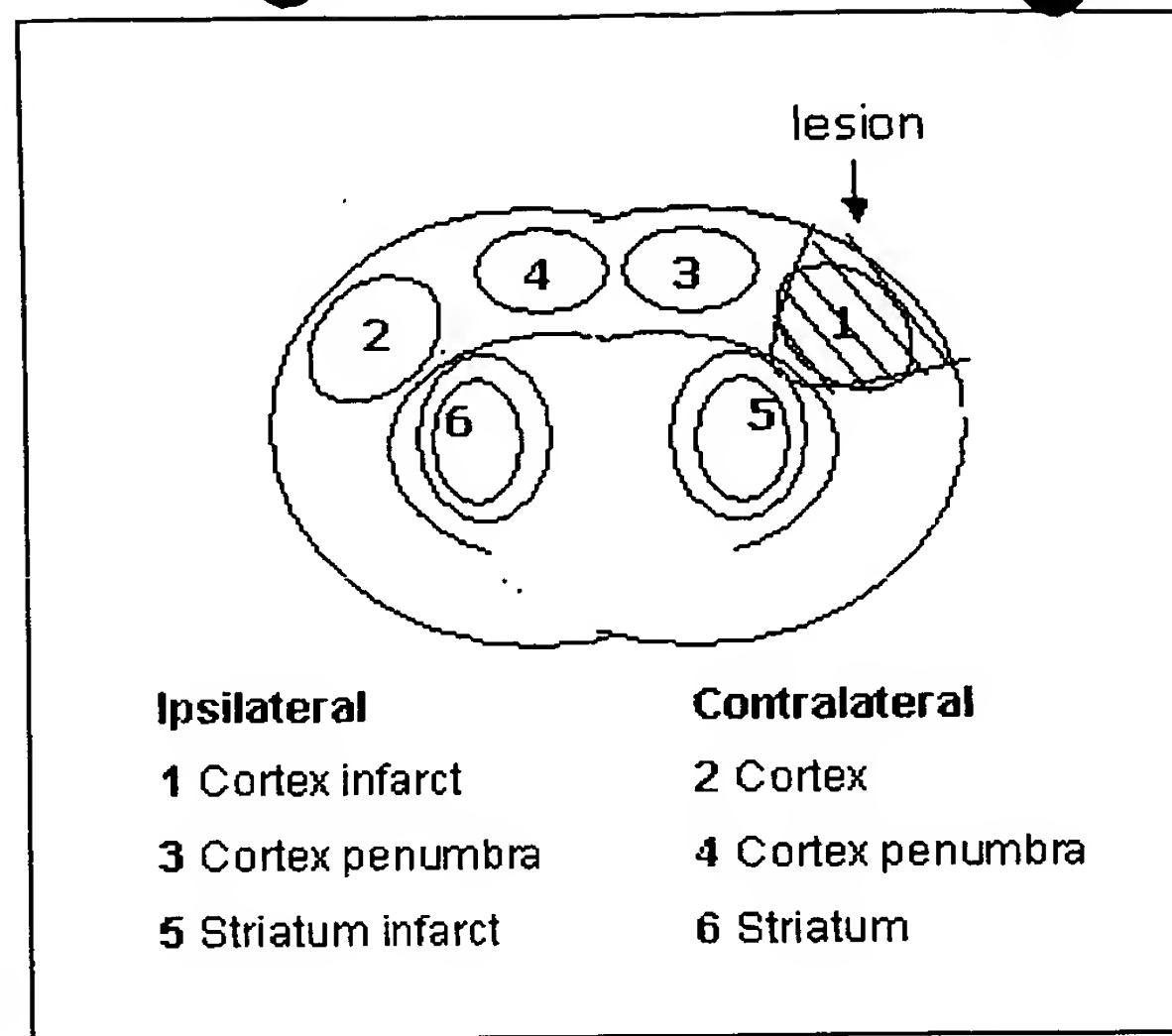


Figure 8, part II

a



b

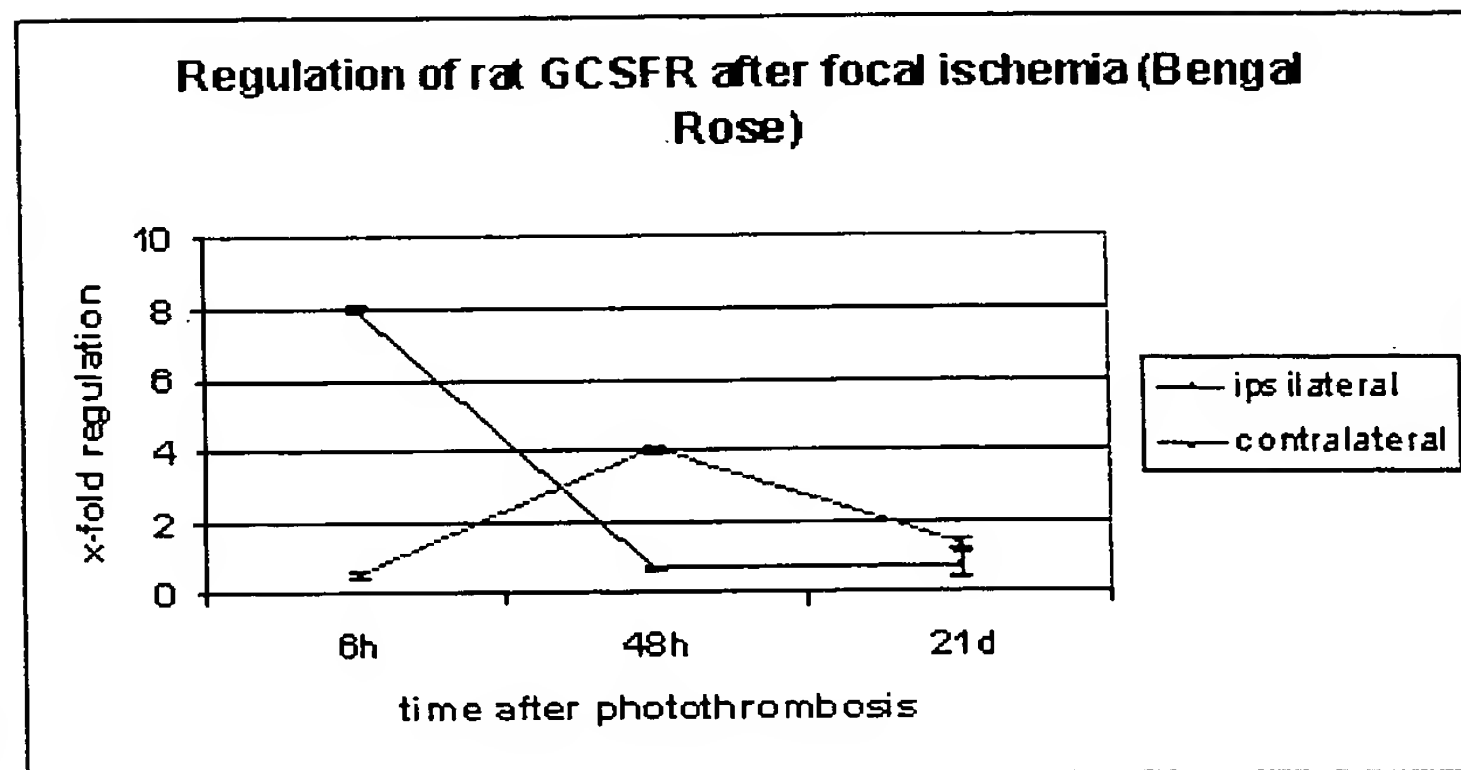


Figure 9

1	M A G P A T Q S P M K L M A L Q L L L W H S A L W T V Q E A	hum G-CSF
1	M A Q L S A Q R R M K L M A L Q L L L W Q S A L W S G R E A	mouse G-CS
1	- - - - - M K L M A L Q L L L W H S A L W S G Q E A	rat G-CSF
1	- - - - - K L M A L Q L L L W H S A L W M V Q E A	feline G-C
1	- - - - - M K L M V L Q L L L W H S A L W T V H E A	bovine G-C
1	- - - - - M K L M A L Q L L L W H I A L W M V P E A	pig G-CSF
31	T P L G P A S S L P - - - - - Q S F L L K C L E Q V R K I	hum G-CSF
31	V P L V T V S A L P P S L P L P R S F L L K S L E Q V R K I	mouse G-CS
22	I P L L T V S S L P P S L P L P R S F L L K S L E Q V R K I	rat G-CSF
21	T P L G P T S S L P - - - - - Q S F L L K C L E Q V R K V	feline G-C
22	T P L G P A S S L P - - - - - Q S F L L K C L E Q V R K I	bovine G-C
22	A P L S P A S S L P - - - - - Q S F L L K C L E Q V R K I	pig G-CSF
55	Q G D G A A L Q E K L V S E C A T Y K L C H P E E L V L L G	hum G-CSF
61	Q A S G S V L L E Q L - - - C A T Y K L C H P E E L V L L G	mouse G-CS
52	Q A R N T E L L E Q L - - - C A T Y K L C H P E E L V L F G	rat G-CSF
45	Q A D G T A L Q E R L - - - C A A H K L C H P E E L V L L G	feline G-C
46	Q A D G A E L Q E R L - - - C A A H K L C H P E E L M L L R	bovine G-C
46	Q A D G A E L Q E R L - - - C A T H K L C H P Q E L V L L G	pig G-CSF
85	H S L G I P W A P L S S C P S Q A L Q L A G C L S Q L H S G	hum G-CSF
88	H S L G I P K A S L S G C S S Q A L Q Q T Q C L S Q L H S G	mouse G-CS
79	H S L G I P K A S L S S C S S Q A L Q Q T K C L S Q L H S G	rat G-CSF
72	H A L G I P Q A P L S S C S S Q A L Q L T G C L R Q L H S G	feline G-C
73	H S L G I P Q A P L S S C S S Q S L Q L T S C L M Q L H G G	bovine G-C
73	H S L G L P Q A S L S S C S S Q A L Q L T G C L M Q L H G G	pig G-CSF
115	L F L Y Q G L L Q A L E G I S P E L G P T L D T L Q L D V A	hum G-CSF
118	L C L Y Q G L L Q A L S G I S P A L A P T L D L L Q L D V A	mouse G-CS
109	L F L Y Q G L L Q A L A G I S S E L A P T L D M L H L D V D	rat G-CSF
102	L F L Y Q G L L Q A L A G I S P E L A P T L D M L Q L D I T	feline G-C
103	L F L Y Q G L L Q A L A G I S P E L A P T L D T L Q L D V T	bovine G-C
103	L V L Y Q G L L Q A L A G I S P E L A P A L D I L Q L D V T	pig G-CSF
145	D F A T T I W Q Q M E E L G M A P A L Q P T Q G A M P A F A	hum G-CSF
146	M F A T T I W Q Q M E N L G V A P T V Q P T Q S A M P A F T	mouse G-CS
139	M F A T T I W Q Q M E S L G V A P T V Q P T Q S T M P I F T	rat G-CSF
132	D F A I N I W Q Q M E D V G M A P A V P P T Q G T M P T F T	feline G-C
133	D F A T N I W L Q M E D L G A A P A V Q P T Q G A M P T F T	bovine G-C
133	D L A T N I W L Q M E D L R M A P A S L P T Q G T V P T F T	pig G-CSF
175	S A F Q R R A G G V L V A S H L Q S F L E V S Y R V L R H L	hum G-CSF
178	S A F Q R R A G G V L A I S Y L Q G F L E T A R L A L H H L	mouse G-CS
169	S A F Q R R A G G V L V T S Y L Q S F L E T A H H A L H H L	rat G-CSF
162	S A F Q R R A G G T L V A S H L Q S F L E V A Y R A L R H F	feline G-C
163	S A F Q R R A G G V L V A S Q L H R F L E L A Y R G L R Y L	bovine G-C
163	S A F Q R R A G G V L V V S Q L Q S F L E L A Y R V L R Y L	pig G-CSF
205	A Q P	hum G-CSF
208	A	mouse G-CS
199	P R P A Q K H F P E S L F I S I	rat G-CSF
192	T K P	feline G-C
193	A E P	bovine G-C
193	A E P	pig G-CSF

Figure 10

MARLGNCSLTWAAL I I LLLPGSLEECGHI SVSAPI VHLGDP I TASC I I KQNC SHLDPEPQ	1 gcr
MYGLGACTLTGVTL I FLLLPRSLESCGHI EI SP PVVRLGDPV LASCT I SPNCSKL DQQA K	m gcr
-----LEGCGQI RI SP PI VHLGDPV LASCT I SPNCSKL DRQPK	1 gcr (tag)
I LURLGAE- LQPGG RQRLSDGTQESI I TPLHL NHTQAF LSCCLNUGNSLOI LDQVEL RA	1 gcr
I LURLQDEPI QPGD RQHHL PDGTQESI I TPLHL NYTQAF LFC LVPWEDSVOL LDQAE LHA	m gcr
I LURLQDEPNQPGD RQHHL PDGSQESI I TPLHL NYTQAF LFC LVPWUNNSFOVL LDQAE LRA	1 gcr (tag)
GYPPI PHNLSCL MNLTTSSLI CQMEPGPETHL PTSFTL KSF KSRGNCOTQGD SI LDCVP	1 gcr
GYP PASPSNL SCL MHLTTNSLVQMEPGPETHL PTSFI LKSF RSRADCOYQGD TI PDCVA	m gcr
GCKSLQPP-----THLLO	1 gcr (tag)
KDGQS HCCI PRKHL LLYQNGI WQAENALGTS MSPQLCL DP MDVVKLEPP MLRTNDPSP	1 gcr
KKRONCSI PRKNL LLYQYMAI WQAENMLGSS ESP KLCL DP MDVVKLEPP MLQALDI GP	m gcr
	1 gcr (tag)
EAAPPQAGCLQLCWEPUQPLHI NQKCEL RHKPPORGEASWAL VGPLPLEALQVELCGLLP	1 gcr
DVVSHPGCLWLSWKPKPKSEYMEQECELRYQQL KGANWTL VFHL PSSKDO FELCGLHQ	m gcr
	1 gcr (tag)
ATAYTLQI RCI RNP L PGHNSDMSPL EL RTTERAPT VRLDTWNRQRLDP--RTVQLFWK	1 gcr
APVYTLQMRCI RSSLPGFMSPMSP GLQLRPTMKAPT I RLDTWCQKKQLDPGT VSVQLFWK	m gcr
	1 gcr (tag)
PVPLEEDSGRI QGYVVSWRPSCQAGAI LPLCNTTEL SCTFHL PSEAQEV ALVAYNSAGTS	1 gcr
PTPLQEDSGQI QGYLLSWNSPDHQGD I HLCNTTQLSCI FLLPSEAQNVTLVAYNKAGTS	m gcr
	1 gcr (tag)
RPTPVVFSESRGPA LTRLHAMARD PHSUWGME PPNPWPQGYVI ENGLGPPSASNSNKTW	1 gcr
SPTTVVFLENEGPAVTGLHAMAQDLNTI WWDMEAPSLLPQGYLI EWENSSPSYNNSYKSW	m gcr
	1 gcr (tag)
RMEQNGRATGFLKENI RPFQLYEII VTPLYQDTMGPSQHVYAYSQEMAPSHAPELHLKH	1 gcr
MI EPNGNI TGI LKONI NPFQLYRI TVAPLYPGI VGPPVNVYTFAGERAPP HAPALHLKH	m gcr
	1 gcr (tag)
I GKTWAOLEWPEPPELGKSP LTHYTI FWTNAQ NOSFSAI LNASSRGFVLHGLEPASLYH	1 gcr
VGTTWAOLEWPEAPRLGMI PLTHYTI FWAADAGDHSFSVTLNI SLHDFVLKHL EPASLYH	m gcr
	1 gcr (tag)
I HLMASQAGATNSTVLT LMTLTP EGSELHI I LGLFGL LLLTCLCGTAWLCCSPNRKNP	1 gcr
VYLMATSRAGSTNSTGLTLRTLDP--SDLNI FLGIL-CLVLLSTTCVVTWLCCKRRGKTS	m gcr
	1 gcr (tag)
LWPSVPDPAHSSLGSWPTI MEEDAFQLPGLG--TPPTKLTVLEEDEKKPVPWESHNS	1 gcr
FWSVPDPAHSSLSSWLP TI MTEETFQLPSFWSVPSI TKI TELEED- KKP THWSE- S	m gcr
	1 gcr (tag)
SETGLPTLVQTYVLOGDPRAVSTQ PQSQSGTS DOVLYGQLLGSPTSPGPGHYLRCDSTQ	1 gcr
SGNGSLPALVQAYVLOGDPREI SNQSQPPSRTGDOVLYGQVLESPTSPGVMOYI RSDSTQ	m gcr
	1 gcr (tag)
PLLAGLTPSPKSYENLWQASPLGTLVTPAPSQEDDCVFGPLLNFPLLQGI RVHGMALG	1 gcr
PLLGPTPSPKSYENI WFSRPQETFVPQPPNQEDDCVFGPPFDFPLFOGLVHGVVEEQG	m gcr
	1 gcr (tag)
SF	1 gcr
GF	m gcr
	1 gcr (tag)

Figure 11

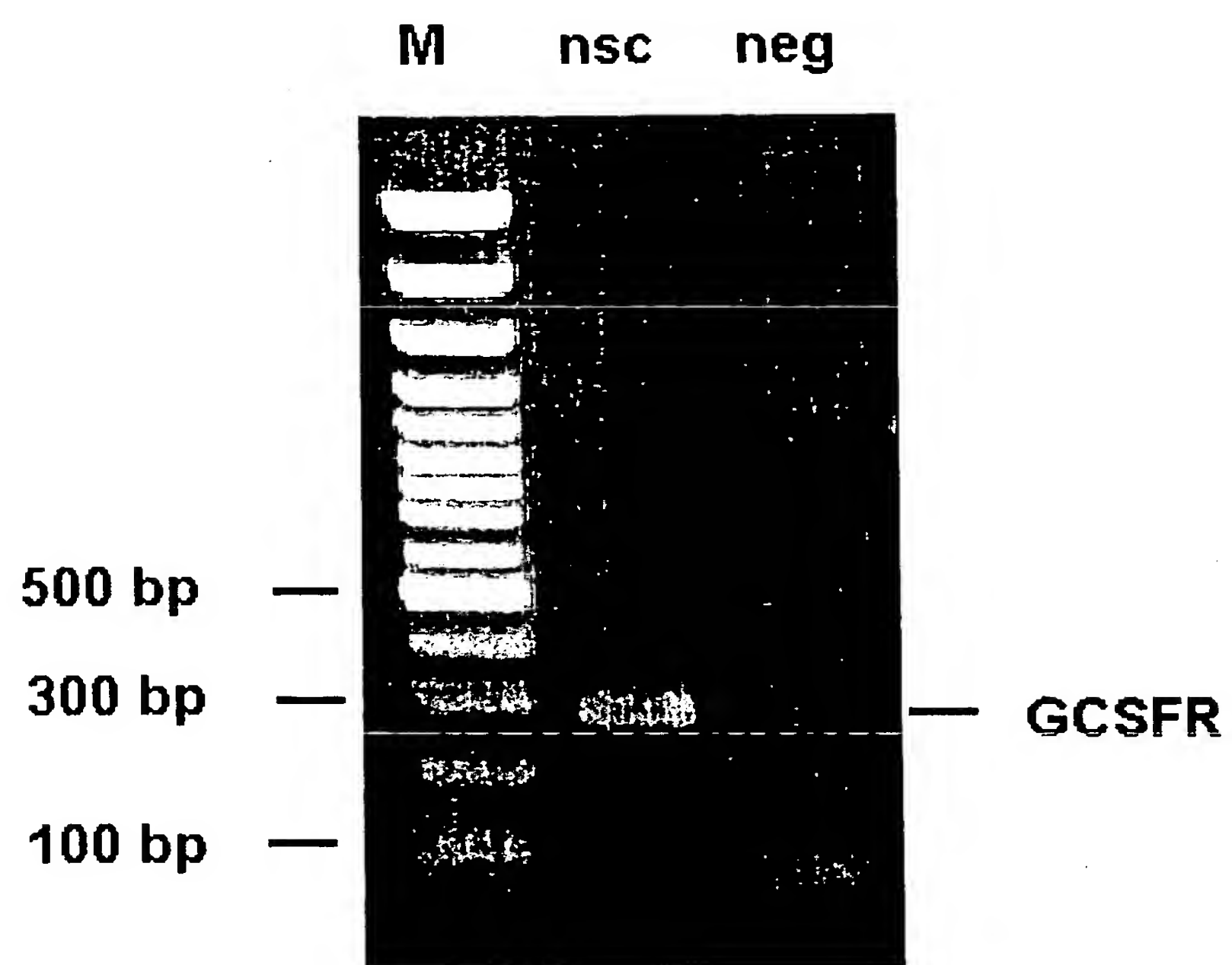


Figure 12

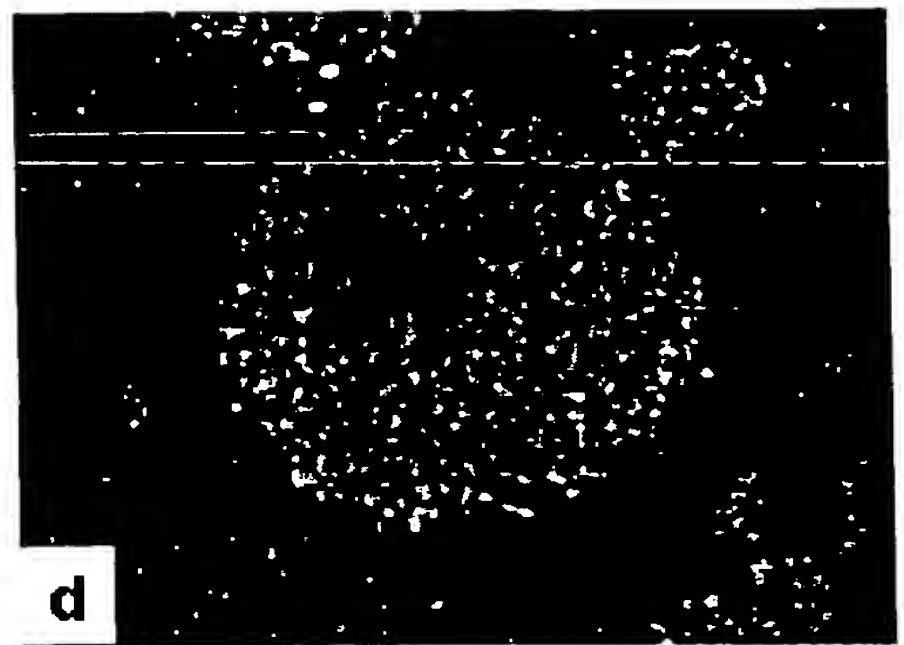
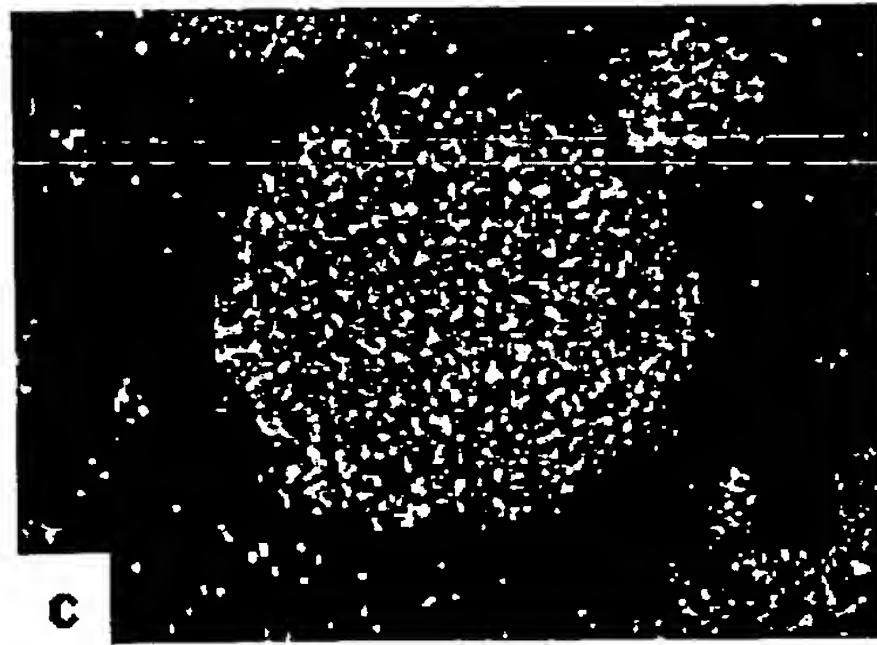
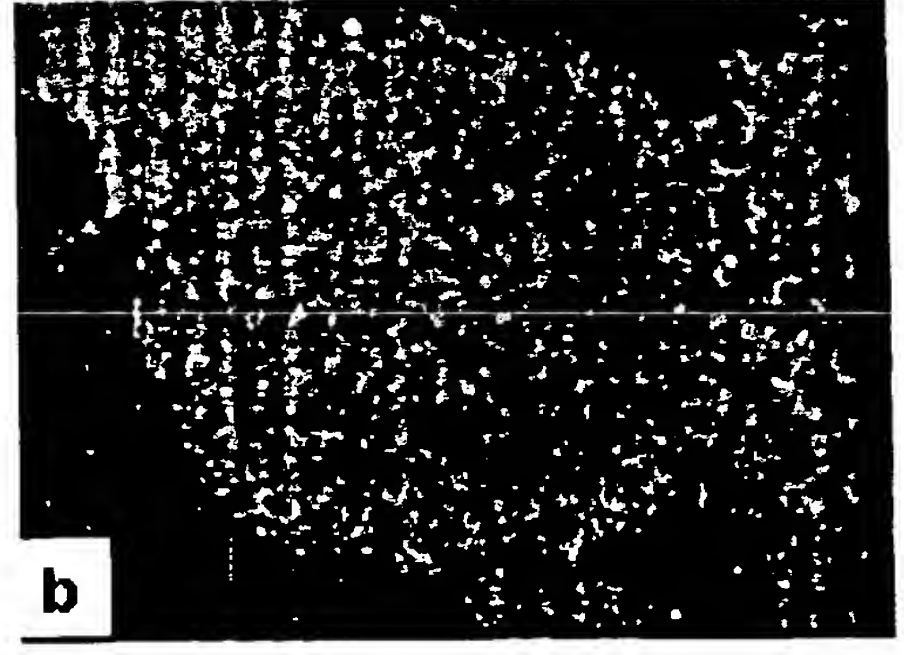
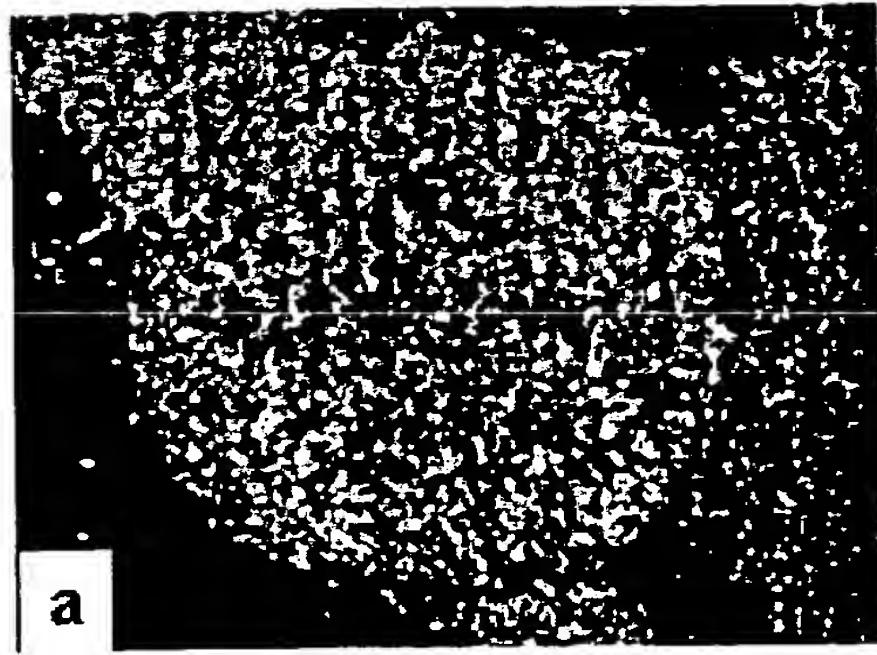
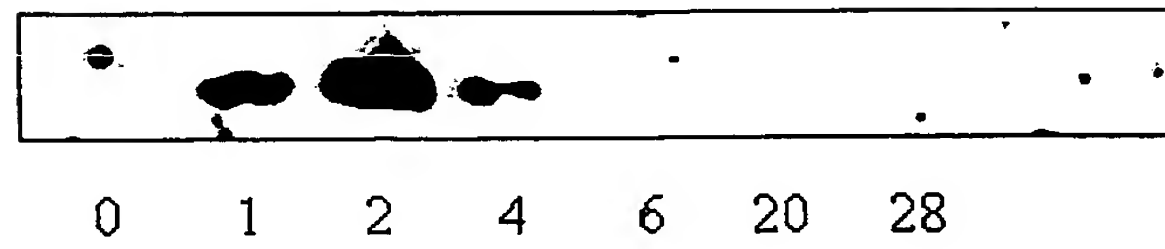


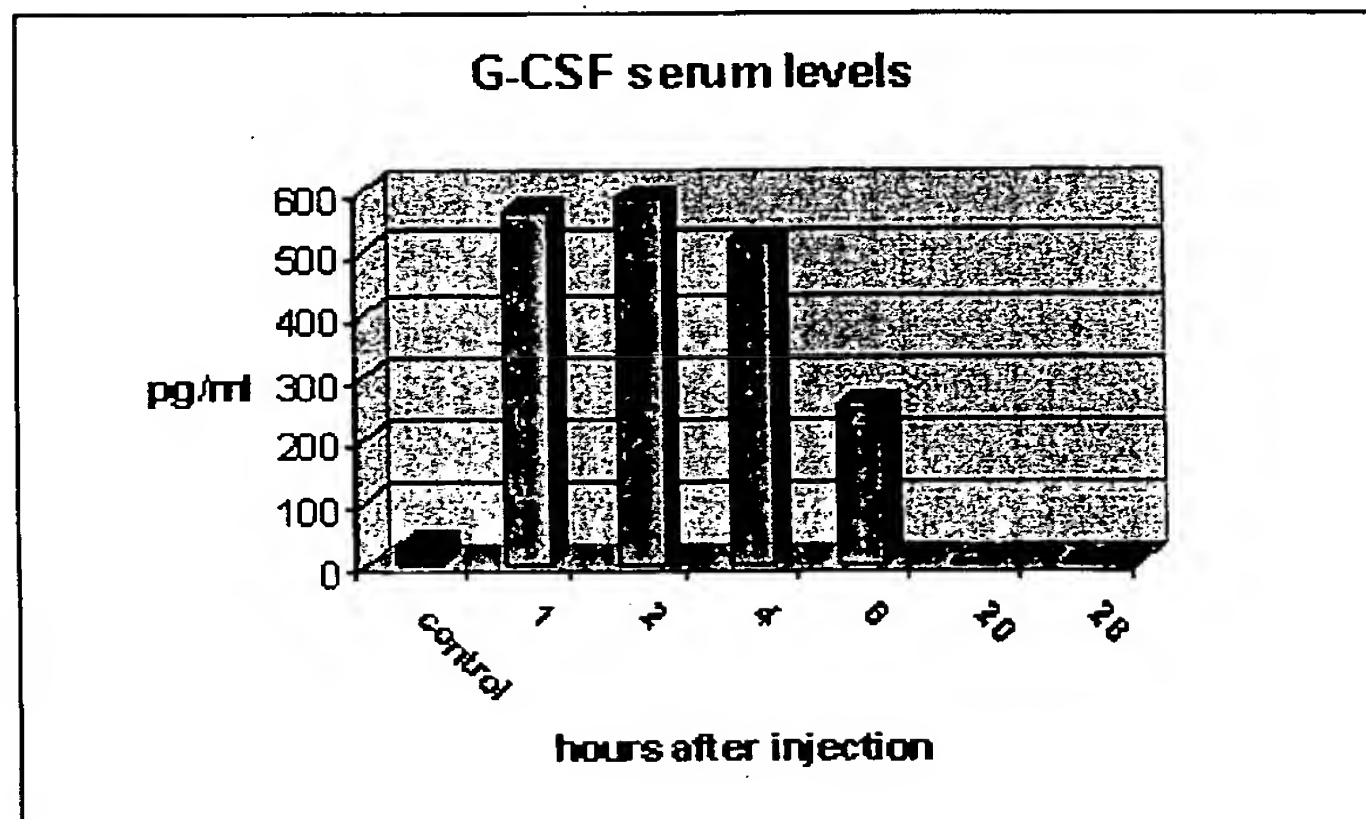
Figure 13

Biotinylated G-CSF detected on blot
via Streptavidin-HRP



A

hours after injection



B

Figure 14

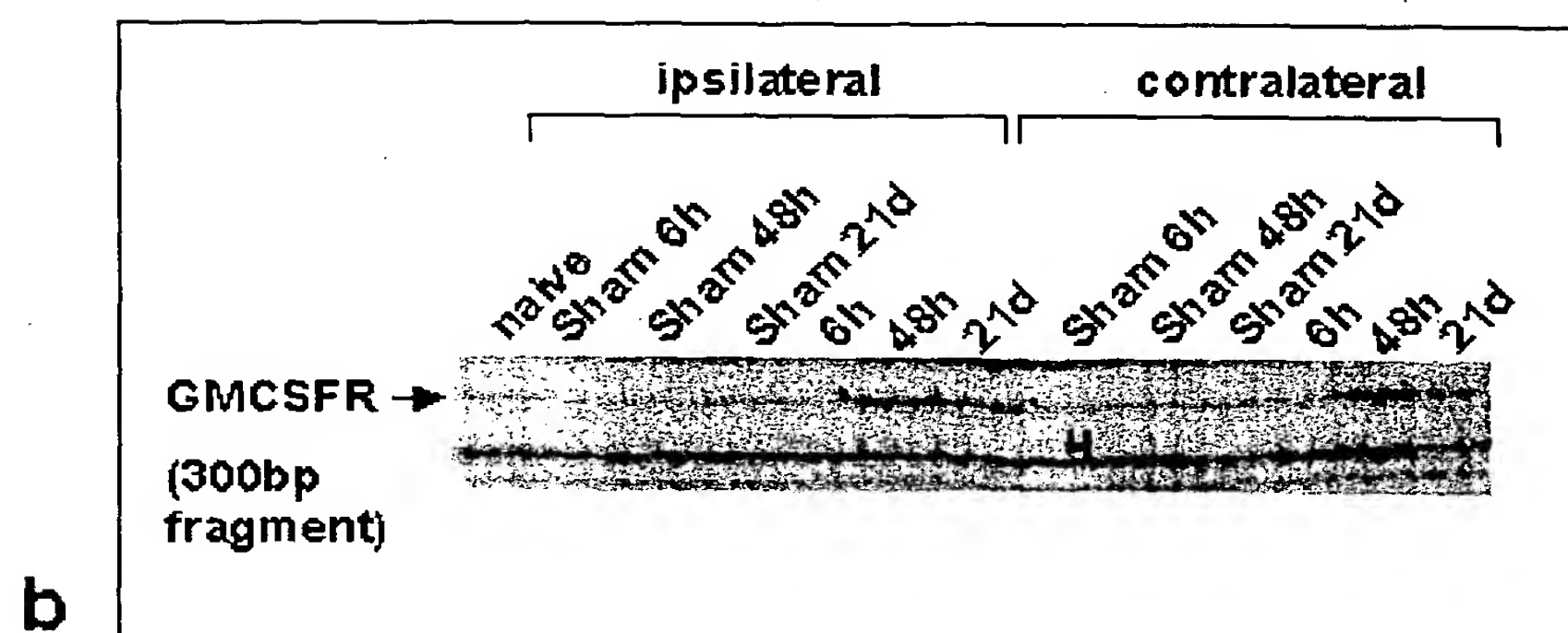
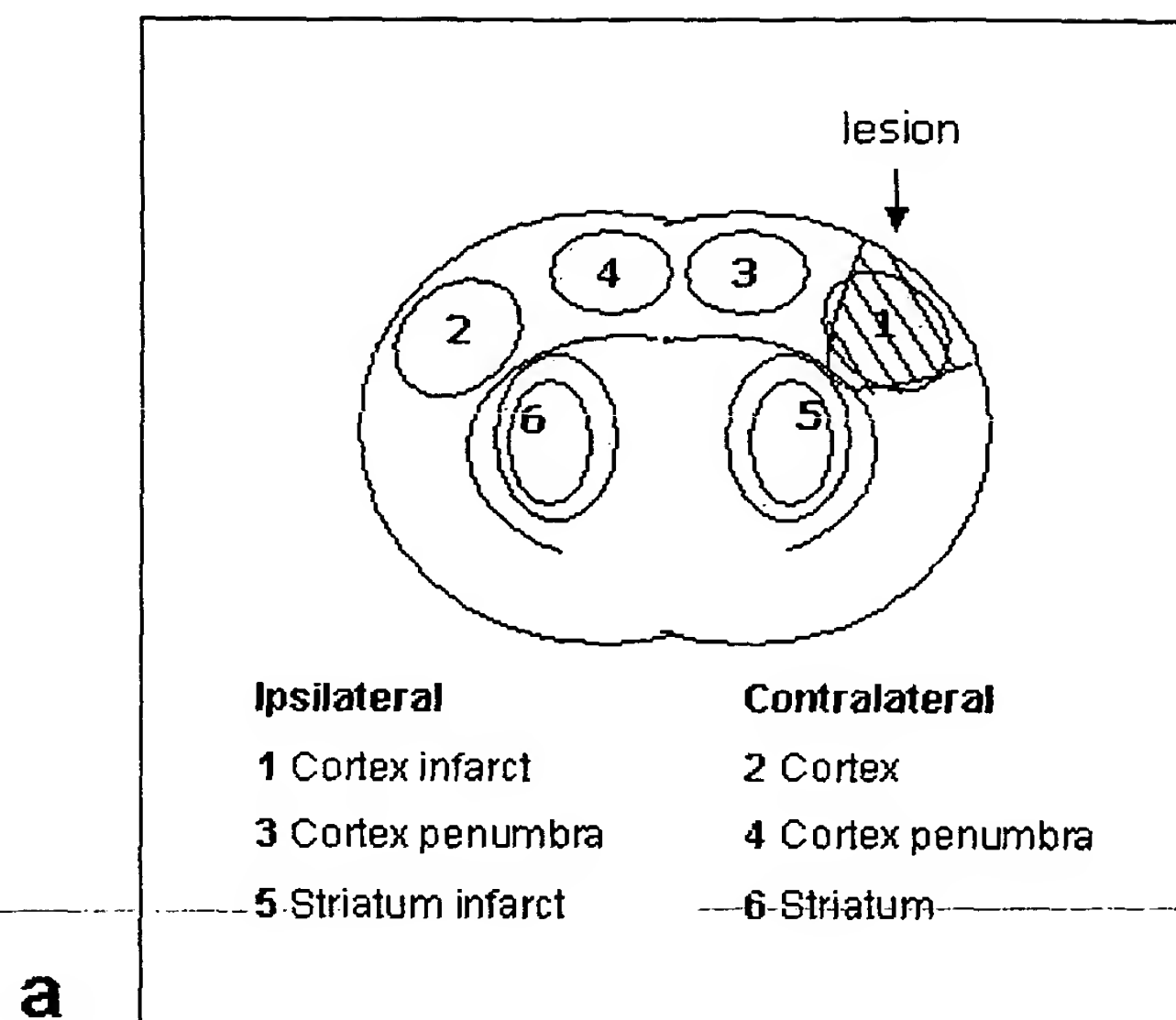


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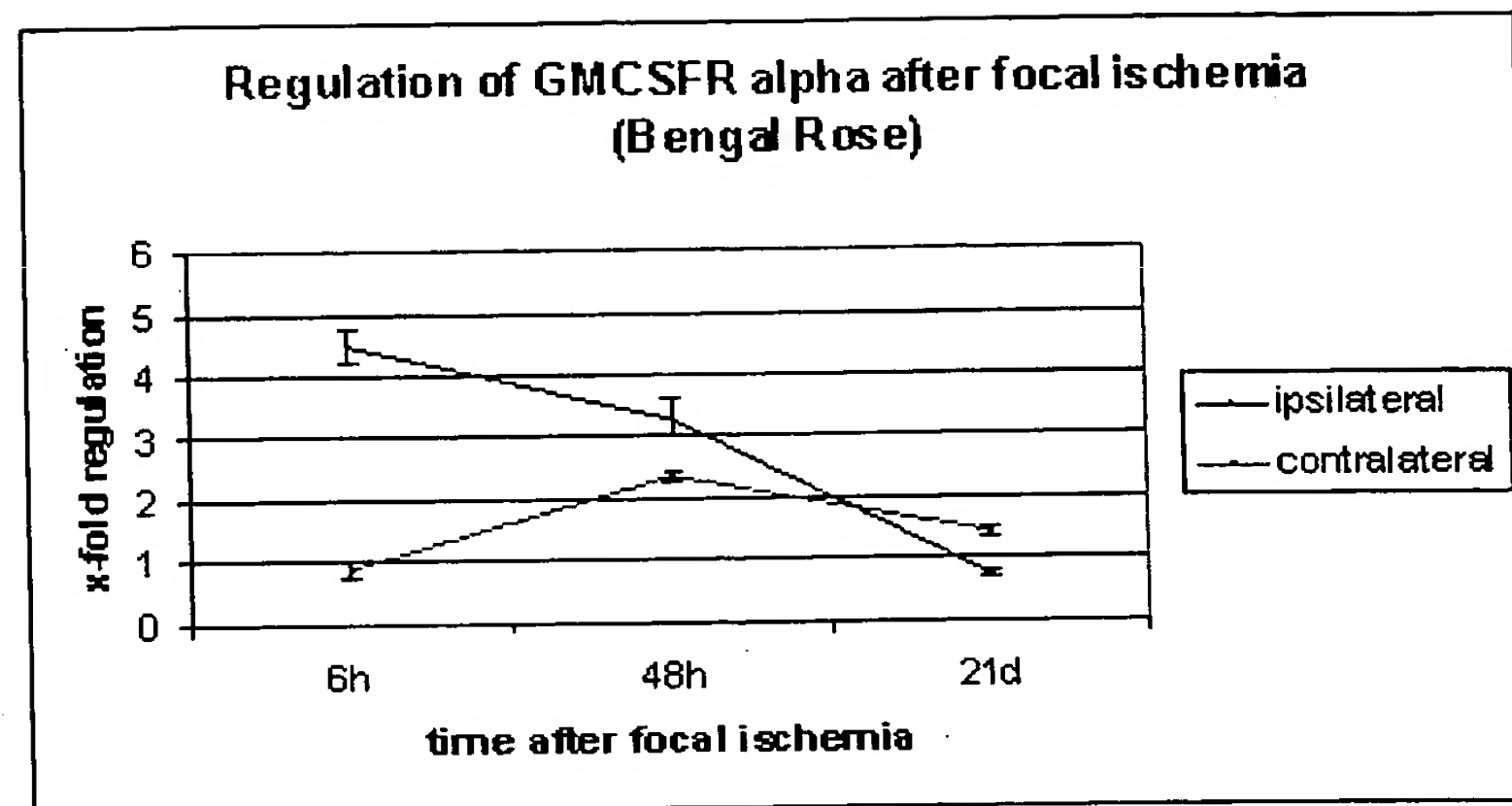


Figure 16

10	20	30	40	
- - - - - M L L L V T - - S L L L C E L P H P A F L L I P E K S D L R T V				hum gncsfr2
M T S S H A M N I T P L A Q - L A L L F S T I L L P G T Q A L L A P T T P - - -				mouse csf 2
- - - - - M S I I P L P Q L L A L L C C C G L A A A T Q G P T D P S T P P H L				rat gncsfr
50	60	70	80	
A P A S S L M V R F D S R T M M L S W D C Q E N T - - - T F S K C F L T D K K N				hum gncsfr2
D A G S A L N L T F D P G T R T L T W A C D T A A G N V T V T S C T V T S R E A				mouse csf 2
G L A H F H N L T F D P G T W T L S W A C G G H D G - - A V M S C T V I D Q E A				rat gncsfr
90	100	110	120	
R V V E P R L S M M E C S C T F R - E I C L H E G V T F E V H V N T S Q R G F Q				hum gncsfr2
G I H R - R V S P F G C R C W F R R M M A L H H C V T L D V N G T V G G A A A H				mouse csf 2
G I R R - R V R S R G C R C R F Q - P M E L H R G V D L E V A G D K G H A Q V H				rat gncsfr
130	140	150	160	
Q K L L Y P M S G R E G T A A Q M F S C F I Y N A D L M N C T W A R G P T A P R				hum gncsfr2
W R L S F V M E S A A G S G A E M L T C E I R A A R F L S C A W R E G P A A P A				mouse csf 2
Q T L R F E M E G A P G S G A E M L T C E I L A A H F L C C Y W A V G P A A P D				rat gncsfr
170	180	190	200	
D V Q Y F L Y I R M S K R R R E I R C P Y Y I Q D S G T H V G C H L D M L S G L				hum gncsfr2
D V R Y S L R V L M S T G H D V A R C M A D P G D - D V I T Q C I A N D L S L L				mouse csf 2
D I R Y S L R V L M A T G H E V A S C S A A P G - - T P P T R C Q A D D L T H L				rat gncsfr
210	220	230	240	
T S R N Y F L V N G T S R E I G I Q F F D S L L D T K K I E R F M P P S M V T V				hum gncsfr2
G S E A Y L V V T G R S G A G P V R F L D D V V A T K A L E R L G P P R D V T A				mouse csf 2
P R L A Y I V V T G Q S R T G L V R F L D A V V N T K G I E R L G P P D N V S A				rat gncsfr
250	260	270	280	
R C N T T H C L V R W K Q P R T Y Q K L S Y L D F Q Y Q L D V H R K N T Q P G T				hum gncsfr2
S C M S S H C T V S W A P P S T W A S E T A R D F Q - - T E V Q W Q S A E P G S				mouse csf 2
S C M F S H C T I T W A P P P T W A P M T E Q D F R - - F E I E W K K A E P S S				rat gncsfr
290	300	310	320	
E N L L I N V S G D L E N R Y M F P S S E P P A K H S V K I R A A D V R I L M W				hum gncsfr2
T P R K V L V V - - E E T R L A F P S P A P H G G H K V K V R A G D T R M K H W				mouse csf 2
I A Q K V V I A G R E D N A F A P S S P A P R G R L W V R V R A G D T R S D R W				rat gncsfr
330	340	350	360	
S S W S E A I E F G S D D G N L G S V Y I Y V L L I V G T L V C G I V L G F L F				hum gncsfr2
G E W S P A H P L E A E D T R V P G A L L Y A V T A C A V L L C A L A L G V T C				mouse csf 2
S D W S P A L E L G S E A T T P P R A L V L A A S S C A A L L C A L A L G A A C				rat gncsfr
370	380	390	400	
K R F L R I Q R L F P P V P Q I K D K L M D N H E V E D E I I W E E F T P E E G				hum gncsfr2
R R F E V T R R L F P P I P G I R D K V S D D V R V N P E T L R K D L L Q P				mouse csf 2
R R L A L S R R L L P P I P G I R D R V S D D E R V M S E T L R K D L L R P				rat gncsfr
410				
K G Y R E E V L T V K E I T				hum gncsfr2
				mouse csf 2
				rat gncsfr

Figure 17

10	20	30	40	
---	---	---	---	rat gnc:
MQLQNL	LLFLG	I V V Y S L S	A P T R S P N P V T R P Q K H V D A I K E A L	mouse gn
MQLQ	S L L L L G T V A C S	I S A P A R S P S P S T Q P Q E H V M A I Q E A R		hum gnc:
50	60	70	80	
S L L N D M R A L E N E K N E D V D I I S N E F S I Q R P T C V Q T R L K L Y K				rat gnc:
N L L D D M P V T L N - - - E E V E V V S N E F S F K K L T C V Q T R L K I F E				mouse gn
R L L N L S R D T A A E M N E T V E V I S E M F D L Q E P T C L Q T R L E L Y K				hum gnc:
90	100	110	120	
Q G L R G N L T X L N G A L T M I A S H Y Q T N C P P T P E T D C E I E V T T F				rat gnc:
Q G L R G N F T X L K G A L N M T A S Y Y Q T Y C P P T P E T D C E T Q V T T Y				mouse gn
Q G L R G S L T X L K G P L T M M A S H Y K Q N C P P T P E T S C A T Q I I T F				hum gnc:
130	140			
E D F I K N L K G F L F D I P F D C Q K P V Q K				rat gnc:
A D F I D S L K T F L T D I P F E C K K P G Q K				mouse gn
E S F K E N L K D F L L V I P F D C Q E P V Q E				hum gnc:

Figure 18

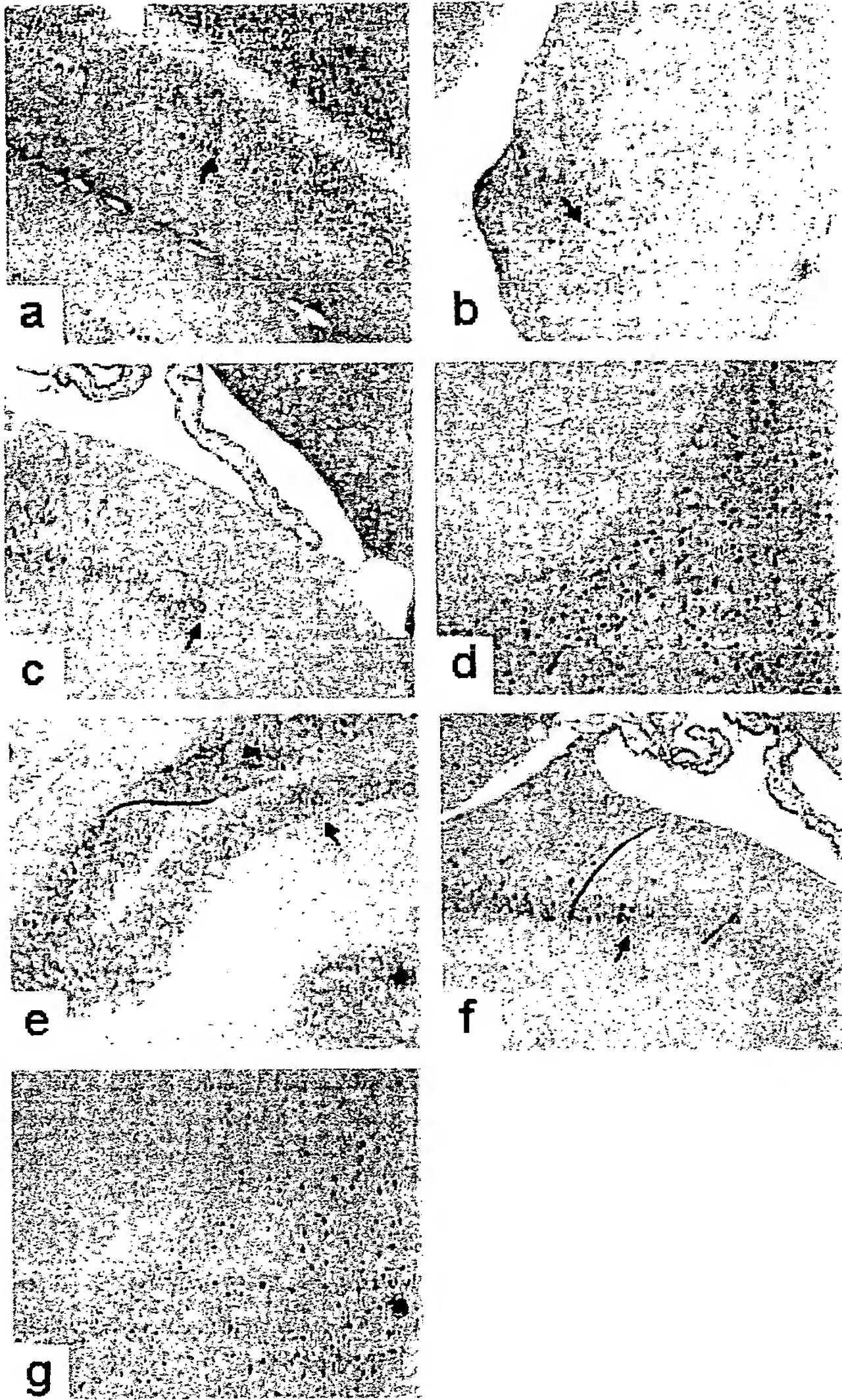


Figure 19, part I

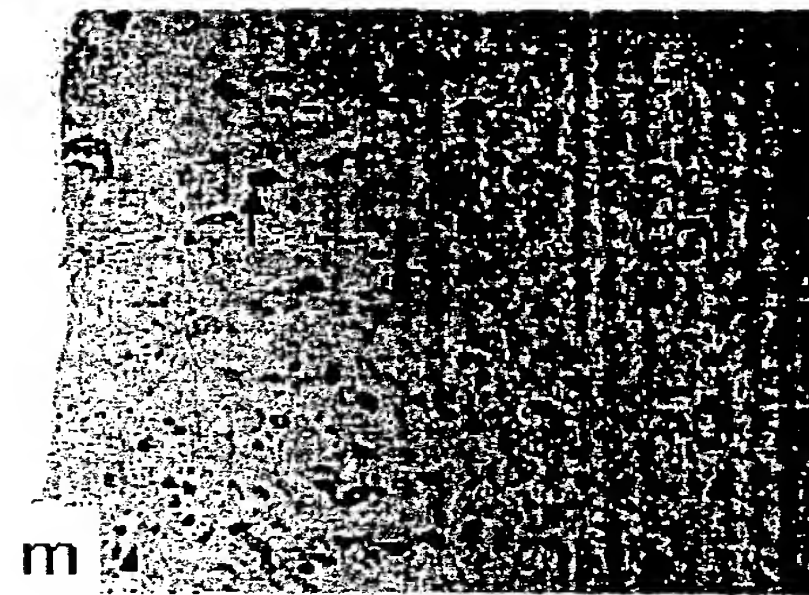
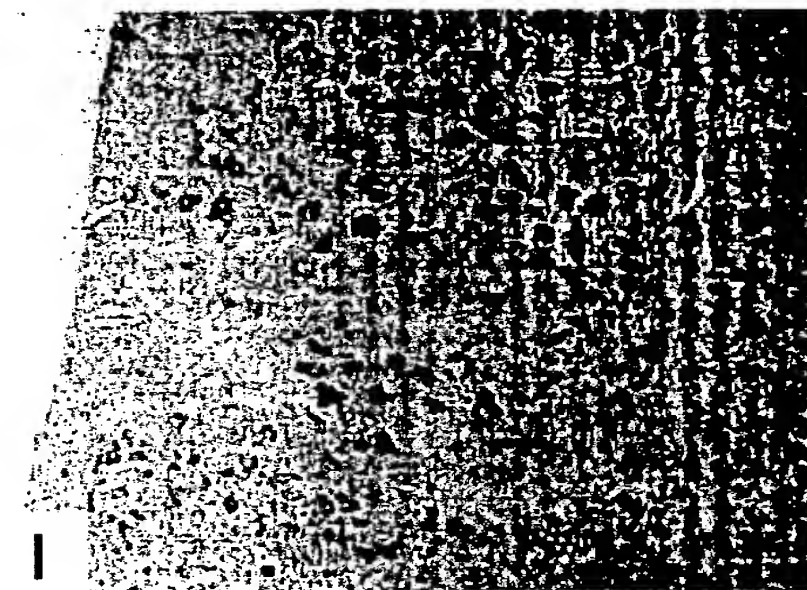
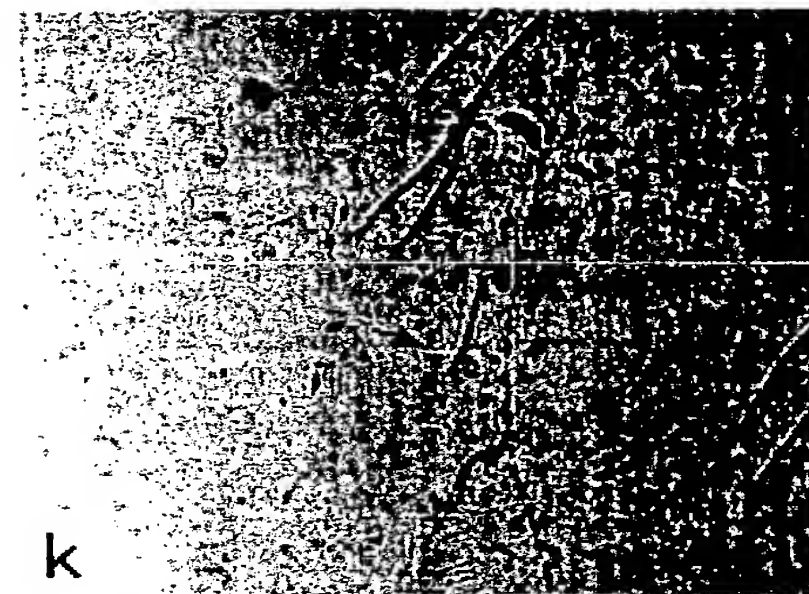
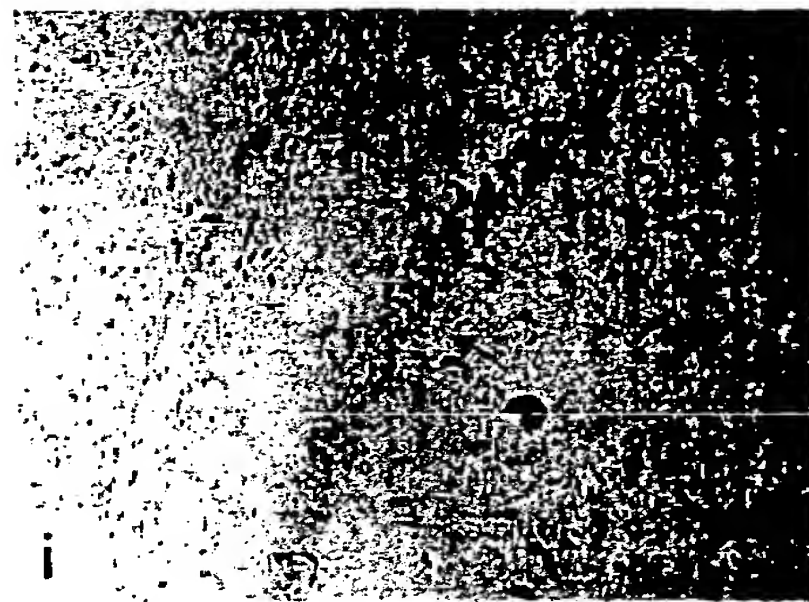
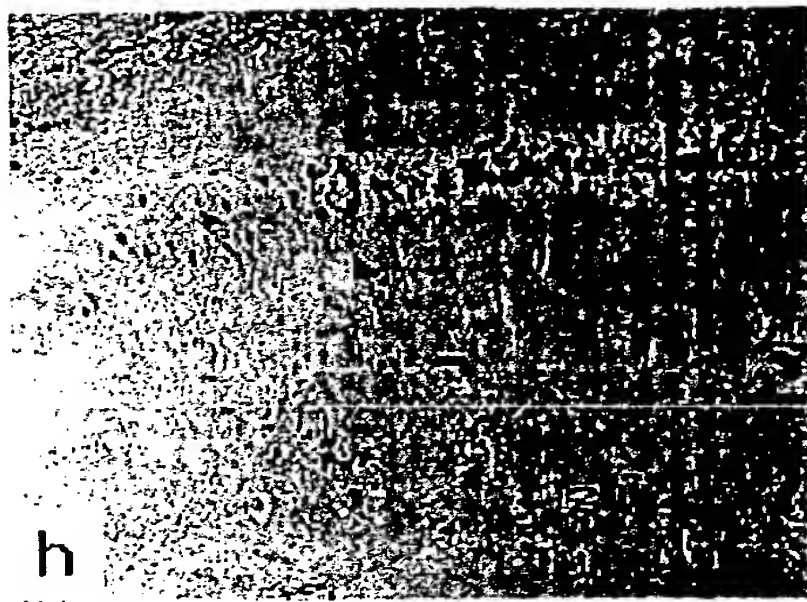


Figure 19, part II

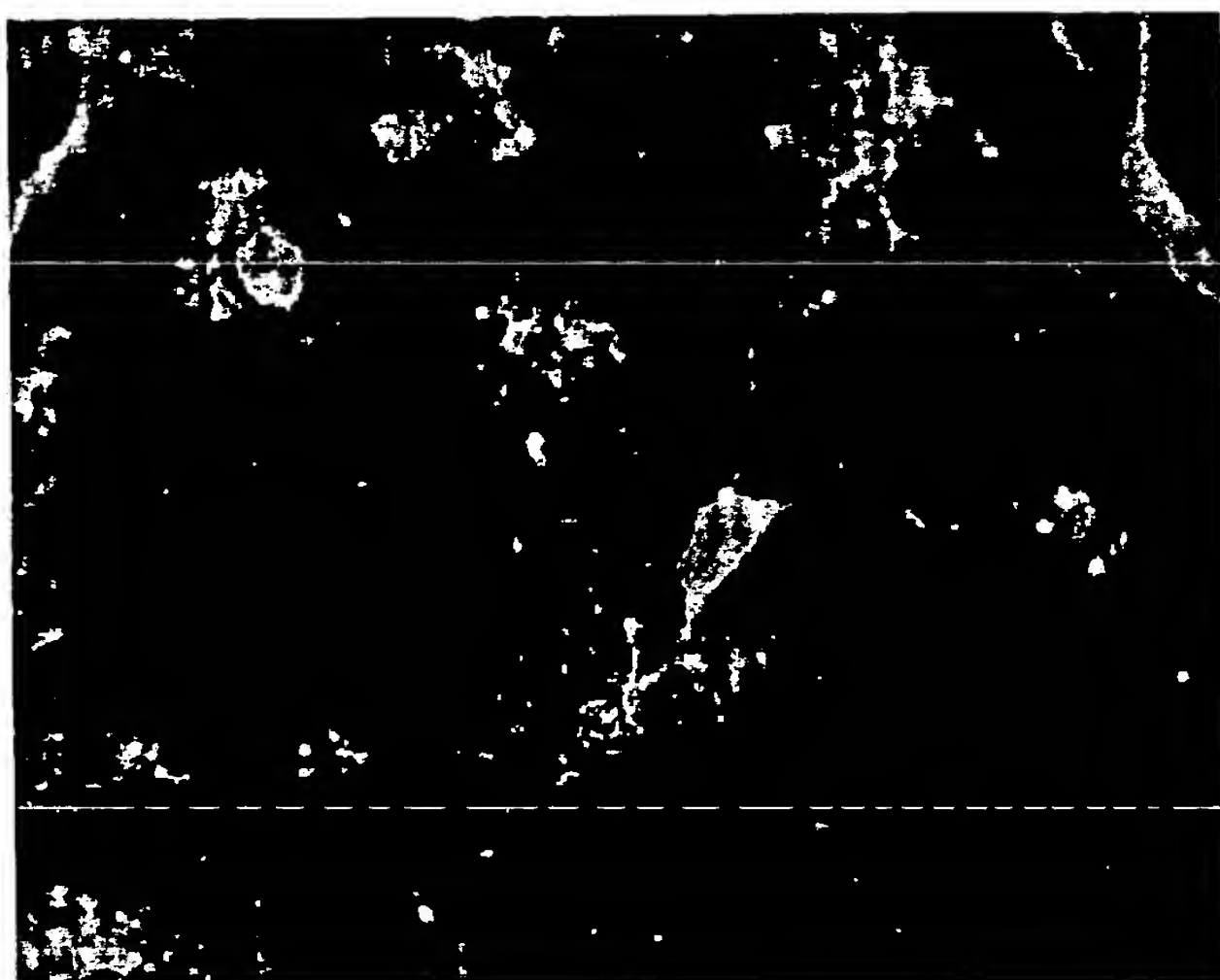


Figure 20

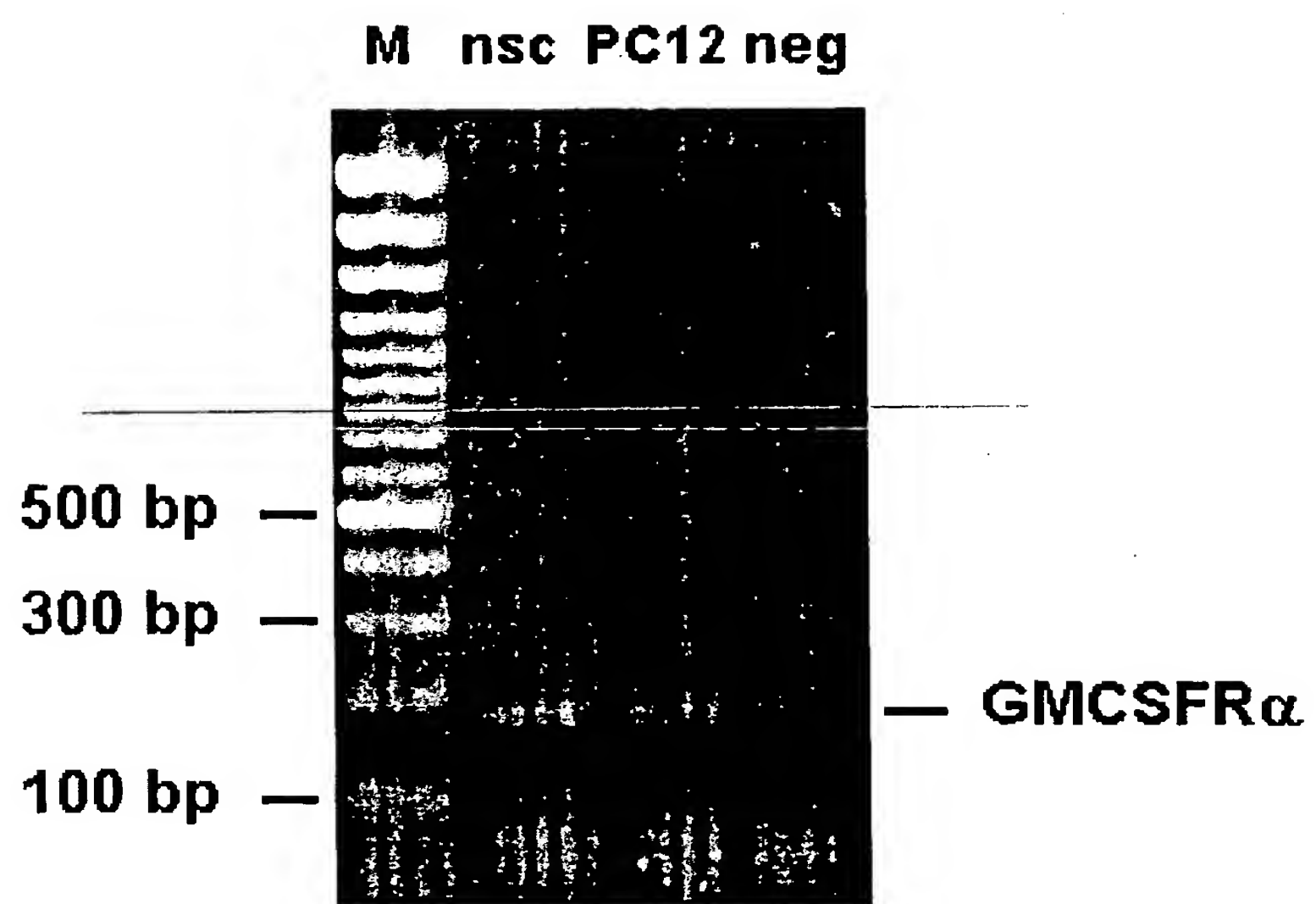
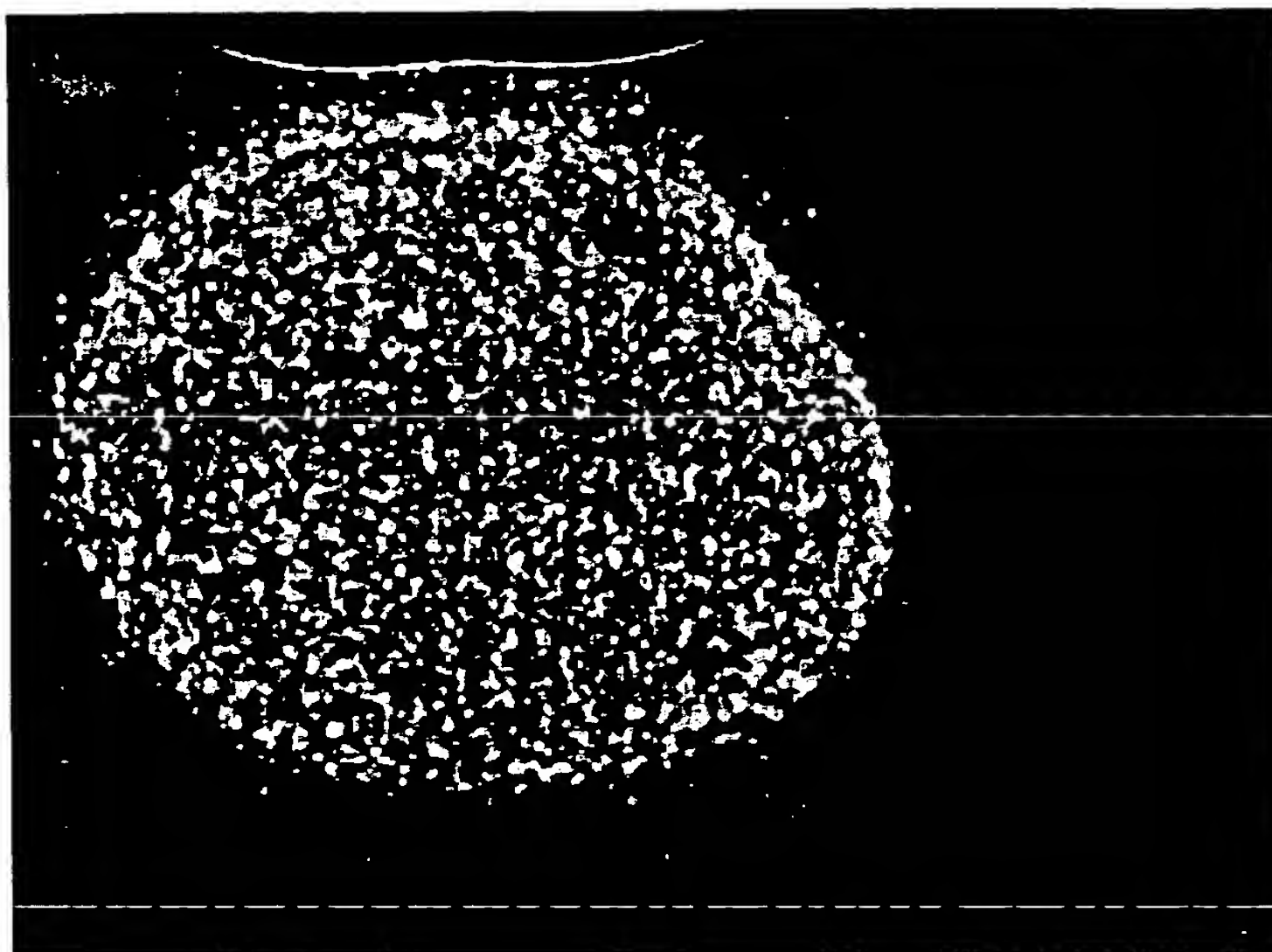


Figure 21

A



B

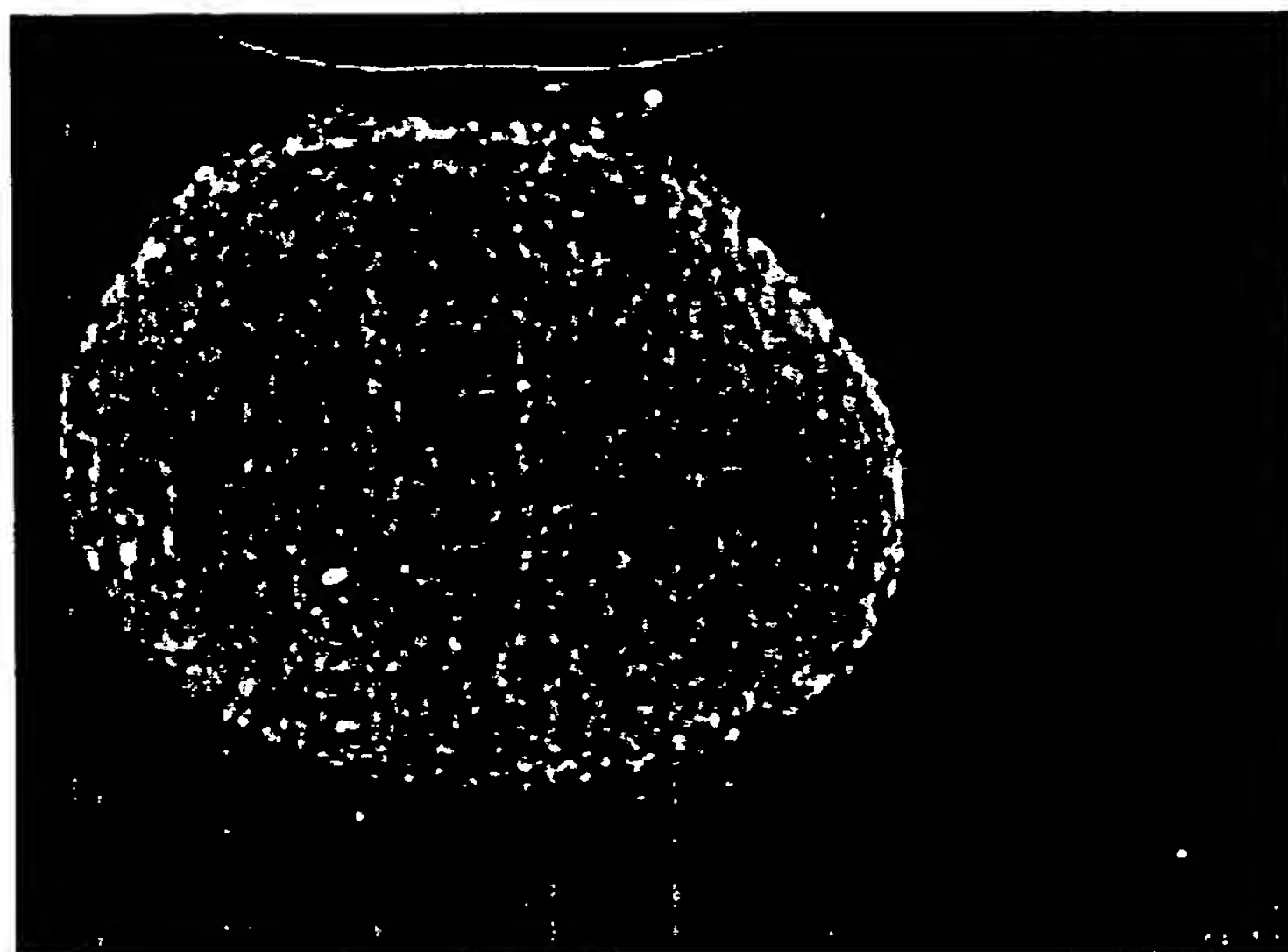


Figure 22

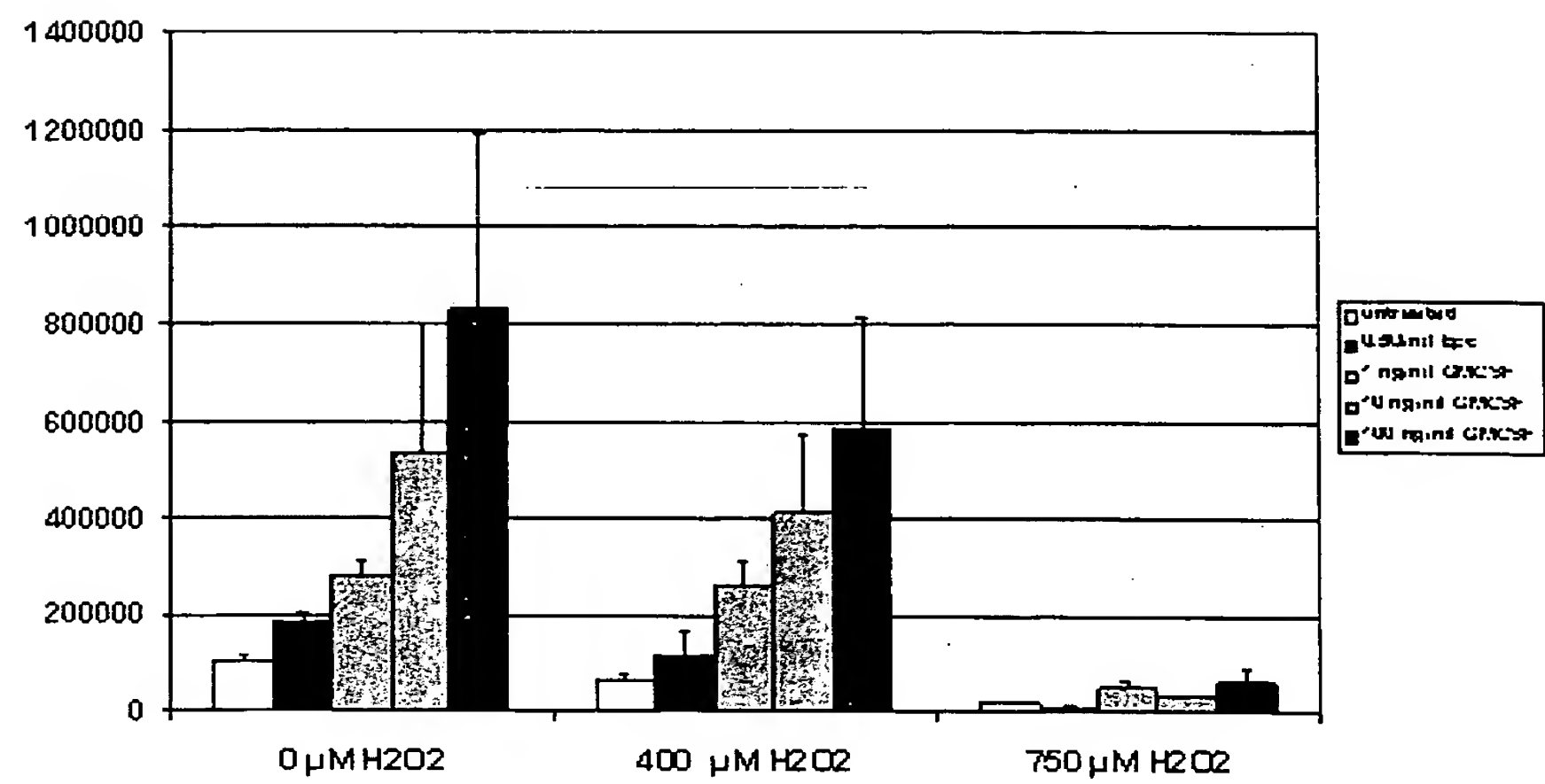


Figure 23